

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) RENEWAL
OFFICE OF AIR QUALITY**

**Eli Lilly and Company - Greenfield Laboratories
2001 West Main Street
Greenfield, Indiana 46140**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F059-12151-00001	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 2, 2002 Expiration Date: May 2, 2007

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- D.1.4 Sulfur Dioxide (SO₂) Emissions From Boilers 254-4 [326 IAC 2-8-4(12)(A)]
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Compliance Determination Requirements

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Two (2) Incinerators

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Compliance Determination Requirements

- D.2.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

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SECTION D.3 FACILITY OPERATION CONDITIONS

One (1) no. 2 fuel oil -fired back-up generator and one (1) no. 2 fuel oil -fired emergency generator (ID #EMG-TOX)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.3.1 Sulfur Dioxide (SO₂) and Nitrogen Oxides NOx) [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

Compliance Determination Requirements

- D.3.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

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SECTION D.4 FACILITY OPERATION CONDITIONS

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Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.4.1 Nitrogen Oxides (NOx)[326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

Compliance Determination Requirements

- D.4.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

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Insignificant activities - Four (4) degreasers

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- D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
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Compliance Determinations Requirements

- D.5.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.5.4 Record Keeping and Reporting Requirements

SECTION D.6 FACILITY OPERATION CONDITIONS

Insignificant Activities - Pharmaceutical production facility (Building 409)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.6.1 Particulate Matter (PM) Emission Limit (Process Operations) [326 IAC 6-3]

Compliance Determinations Requirements

D.6.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Record Keeping and Reporting Requirements [326 IAC 2-8-4]

D.6.3 Record Keeping Requirements

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Quarterly Report Form

Quarterly Report Form

Certification Form

Emergency Occurrence Form

Natural Gas Fired Boiler Certification

Quarterly Deviation and Compliance Monitoring Report Form

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.5 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary pharmaceutical research source.

Authorized individual:	David R. O'Donnell, Manager Plant Engineering, Maintenance and Utilities or Paul Gilson, Team Leader, Environmental Services
Source Address:	2001 West Main Street, Greenfield, Indiana 46140
Mailing Address:	P.O. Box 708, Greenfield, Indiana 46140
SIC Code:	2834 and 2879
County Location:	Hancock County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) Five (5) boilers

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
5	natural gas/no. 2 fuel oil fired boiler (ID#s 254-1, 254-2, 254-3, 254-4, and 262-1) with heat input capacities of 51.0, 63.0, 67.0, and 78.0, and 3.2 million Btu per hour, respectively	none	254-1, 254-2, 254-3, 254-4, and 262-1

(b) Two (2) incinerators

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
1	natural gas-fired, multi chamber, Brule incinerator (ID# 253-1) with a natural gas heat input capacity of 3.9 million Btu per hour	none	253-1
1	natural gas-fired, multi chamber, Consumat incinerator (ID# 241-1) with a natural gas heat input capacity of 2.8 million Btu per hour.	none	241-1

- (c) Two (2) each 500 hours per year, no.2 fuel oil-fired back-up and emergency generators

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
1	No. 2 fuel oil fired back-up generator (ID# B409) with a heat input capacity of 5.63 million Btu per hour	none	0
1	No. 2 fuel oil fired emergency generator (ID #EMG-TOX) with a heat input capacity of 19.3 million Btu per hour	none	0

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) One (1) natural gas/no. 2 fuel oil-fired boiler (ID# 262-2), with a heat input capacity less than or equal to 1.95 million Btu per hour (Note: This insignificant activity has applicable requirements in section D.1).
- (b) Three (3) natural gas-fired boilers (ID#s 293-1, 229-1, and 229-2), with heat input capacities less than or equal to 2.1 million Btu per hour (Note: These insignificant activities have applicable requirements in section D.1).
- (c) Seven (7) no. 2 fuel oil-fired emergency generators (ID#s 226, 240, 241-out, 254a, 254b, 291, and 418), each with a heat input capacity less than or equal to 3.75 million Btu per hour.
- (d) Fifteen (15) natural gas-fired emergency generators (ID#s 206, 223, 229, 235, 241-penthouse, 244, 245, 246, 276, 288, 292, 296, 417, 428-east, and 428-west), each with a heat input capacity less than or equal to 0.66 million Btu per hour.
- (e) Three (3) propane-fired emergency generators (ID#s 212, 290, and 248), each with a heat input capacity less than or equal to 0.42 million Btu per hour.
- (f) Two (2) no. 2 fuel oil fired emergency fire pump engines (ID#s FP-B204 and FP-B208), each with a heat input capacity of 0.82 million Btu/hr. (Note: These insignificant activities have applicable requirements in D.4).
- (g) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (h) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (i) One (1) fuel oil storage tank (ID# 254-F) with a capacity of 250,000 gallons;
- (j) Any degreasing operation that does not exceed 145 gallons of solvent usage per 12 months and not subject to 326 IAC 20-6, including, but not limited to the following:

- (1) One (1) machine shop cold solvent cleaner constructed in 1982;
- (2) Two (2) Building G409 cold solvent cleaners constructed after 1990; and
- (3) One (1) Building 254 cold solvent cleaner constructed after 1990.

(Note: These insignificant activities have applicable requirements in D.5).

- (k) Activities associated with the transportation and treatment of sanitary sewage (on-site sewage treatment facility);
- (l) Asbestos abatement projects regulated by 326 IAC 14-10;
- (m) On-site fire and emergency response training approved by IDEM;
- (n) Laboratories as defined in 326 IAC 2-7-1;
- (o) Farm operations; and
- (p) A pharmaceutical production facility (Building 409).

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued or revised. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the issuance date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee

shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

- (c) Upon written request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the records furnished to EPA, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit may be grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this

permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source. IDEM, OAQ will notify Permittee in writing to specify the requested additional facts needed to determine compliance status of the source.

The compliance certification report which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit and such plans shall include the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts which will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management

Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered by telephone or facsimile;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Data Section)
Facsimile No.: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or

facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ

may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due. [326 IAC 2-8-3]
- (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) For each such change described in subsection (a), the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and

- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (e) Back-up fuel switches specifically addressed in, and limited under, section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
 - (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
 - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, nor an authorized representative, may disclose the information unless and until IDEM, OAQ,

makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

- (2) The Permittee, and IDEM, OAQ acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2, 326 IAC 9-1-2, and Section D.2 of this permit.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would

violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18-1] [40 CFR 61.145, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of regulated asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to

thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.7 Performance Testing [326 IAC 3-6]

There are no stack testing requirements necessary for the source.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.9 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed, whenever applicable, according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40

CFR 68, including the registration and submission of a Risk Management Plan (RMP);
and

All documents submitted pursuant to this condition shall include the certification by the
“authorized individual” as defined by 326 IAC 2-1.1-1(1).

C.12 Compliance Response Plan - Preparation, Implementation, Records and Reports
[326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from, or a violation of, this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken pursuant to Section D. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.13 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.14 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of

this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (e) Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.15 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction as applicable:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) Five (5) natural gas/no.2 fuel oil fired boilers (ID#s 254-1, 254-2, 254-3, 254-4, and 262-1 with heat input capacities of 51.0, 63.0, 67.0, 78.0 and 3.2 million Btu per hour, respectively. These boilers do not have any air pollution control devices and each one exhausts through stack 254-1, 254-2, 254-3, 254-4, and 262-1, respectively.

Insignificant activities:

- (a) one (1) natural gas/no. 2 fuel oil fired boiler (ID #262-2), with a heat input capacity less than or equal to 1.95 million Btu per hour;
- (b) three (3) natural gas-fired boilers (ID#s 293-1, 229-1 and 229-2) with heat input capacities less than or equal to 2.1 million Btu per hour;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Nitrogen Oxides (NO_x) From the Nine Boilers [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

The total usage of natural gas as the primary fuel for all nine (9) boilers including the insignificant units (i.e., boilers 262-2, 293-1, 229-1, and 229-2) shall be limited to 738.0 million cubic feet per twelve consecutive month period, rolled on a monthly basis (Note: For every gallon of #2 fuel oil used, 200 cubic feet of natural gas shall be deducted from this limit.). This fuel usage limitation is necessary to limit the potential to emit NO_x to 36.9 tons per 12 consecutive month period, rolled on a monthly basis from all boilers only. This limit shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules not applicable.

D.1.2 Nitrogen Oxides (NO_x) From Boiler 254-4 [326 IAC 2-8-4(12)(A)]

Pursuant to Construction Permit No. 30-07-93-0074, nitrogen oxide emissions from boiler 254-4 shall be limited to 0.23 pounds per million Btu heat input or an equivalent of 17.94 pounds per hour.

D.1.3 Sulfur Dioxide (SO₂) Emissions From Boilers 254-1, 254-2, and 254-3 [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the combustion of #2 distillate fuel oil for boilers 254-1, 254-2, and 254-3 shall each be limited to 0.5 pounds per million BTU heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.4 Sulfur Dioxide (SO₂) Emissions From Boilers 254-4 [326 IAC 2-8-4(12)(A)]

Pursuant to Construction Permit No. 30-07-93-0074, sulfur dioxide emissions from boiler 254-4 shall be limited to 0.36 pound per million Btu heat input.

D.1.5 Sulfur Dioxide (SO₂) Emissions From the Nine Boilers [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

The total usage of no.2 fuel oil for all nine (9) boilers including the insignificant units (i.e., boilers 262-2, 293-1, 229-1, and 229-2) shall be limited to 3,332.0 kilogallons per twelve (12) consecutive month period, rolled on a monthly basis. This fuel usage limitation is necessary to limit the potential to emit SO₂ to 82.8 tons per 12 consecutive month period rolled on a monthly basis from the boilers only. In order for the source-wide SO₂ emissions to not exceed the Part 70 emission threshold of 100 tons per year, the sulfur content of the no. 2 fuel shall not exceed

0.35 % sulfur content. Compliance with the SO₂ limit shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules not applicable.

D.1.6 Particulate Matter (PM) [326 IAC 6-2-2(b)(c) and 326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-2(b), the particulate matter emissions from the existing boilers; identified as 254-1 and 254-2, located in Hancock County which were existing and in operation on or before June 8, 1972 shall each not exceed 0.39 pound per million Btu (lb/mmBtu).
- (b) Pursuant to 326 IAC 6-2-2(c), the particulate matter emissions from boiler 254-3 located in Hancock County, which began operation after June 8, 1972 and prior to September 21, 1983 shall not exceed 0.35 lb/mmBtu.
- (c) Pursuant to 326 IAC 6-2-4, the particulate matter emissions from the existing boilers; identified as 262-1, 262-2, and 293-1, which were constructed after September 21, 1983 shall each not exceed 0.25 lb/mmBtu.
- (d) Pursuant to Construction Permit No.: 30-07-93-0074, the particulate matter emissions from boiler 254-4 shall not exceed 0.015 lb/mmBtu.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boilers IDs 254-1, 254-2, 254-3 and 254-4 pertaining to the combustion of fuel oil only.

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test these boilers by this permit.

D.1.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-7-4]

Compliance with Conditions D.1.3, D.1.4, and D.1.5 shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pound per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.10 Visible Emissions Notations

- (a) Visible emission notations of the boilers IDs 254-1, 254-2, 254-3 and 254-4 stack exhausts shall be performed once per shift during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.11 Record Keeping Requirements

- (a) The Permittee shall maintain monthly records of the following values:
 - (1) Amount of fuel oil used (for all boilers);
 - (2) Amount of natural gas used (for all boilers);
 - (3) Average sulfur content of fuel oil used (for all boilers);
 - (4) Average higher heating value of the fuel oil used (for boiler IDs 254-1, 254-2, 254-3, and 254-4 only); and
 - (5) Average sulfur dioxide emission rate (expressed in pounds per million Btu)(for boilers 254-1, 254-2, 254-3, and 254-4 only).

Items (1) and (2) shall be used to determine compliance with Condition D.1.1. Items (1) through (5) shall be used to determine compliance with condition D.1.3 and D.1.4. Items (1) and (3) shall be used to determine compliance with condition D.1.5.

Records of sulfur content and higher heating value can be determined by information as obtained from the vendor. As long as the certified vendor analysis indicates that the sulfur content is less than 0.35 percent and the heating value of the fuel oil delivered is greater than 137,000 Btu per gallon, the Permittee can note "less than 0.35 percent" and "greater than 137,000 Btu per gallon" for items (3) and (4) respectively.

- (b) To document compliance with Condition D.1.10, the Permittee shall maintain records of visible emission notations of the boiler IDs 254-1, 254-2, 254-3 and 254-4 stacks while combusting no. 2 fuel oil.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.1.1, and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1-1(1).
- (b) The Permittee shall certify, on the form provided, that natural gas was fired in the boiler at all times during each quarter. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during each quarter.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(b) Two (2) incinerators:

- (1) one (1) natural gas fired, multi chamber, Brule incinerator (ID# 253-1) with a natural gas heat input capacity of 3.9 million Btu per hour. This incinerator does not have any air pollution control device and exhausts through stack 253-1.
- (2) one (1) natural gas fired, multi chamber, Consumat incinerator (ID# 241-1) with a natural gas heat input capacity of 2.8 million Btu per hour. This incinerator does not have any air pollution control device and exhausts through stack 241-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter [326 IAC 4-2]

Pursuant to 326 IAC 4-2 (Incinerator Rule), each of the two (2) incinerators shall:

- (a) consist of primary and secondary chambers or the equivalent;
- (b) be equipped with a primary burner unless burning wood products;
- (c) comply with 326 IAC 5-1 and 326 IAC 2;
- (d) be maintained properly as specified by the manufacturer and approved by the commissioner.
- (e) be operated according to the manufacturer's recommendation and only burn waste approved by the commissioner;
- (f) comply with other state and/or local rules or ordinances regarding the operation of incinerators;
- (g) be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, noxious odors are prevented;
- (h) to not emit particulate matter (PM) emissions in excess of 0.3 pounds per 1,000 pounds of dry exhaust gas at standard conditions corrected to 50% excess air; and
- (i) not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately.

D.2.2 Carbon Monoxide (CO) [326 IAC 9]

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Rule), the Consumat incinerator ID#241-1) shall not discharge carbon monoxide unless the waste gas stream is burned in a direct-flame afterburner or is controlled by other means approved by the Commissioner. The Consumat incinerator, as a multi chamber incinerator, is an approved design by the Commissioner.

D.2.3 Hydrochloric Acid (HAP) [326 IAC 2-7]

The total annual waste throughput to the two (2) incinerators shall not exceed a total of 591 tons per twelve (12) consecutive month period, rolled on a monthly basis. This limitation was taken by the company and is equivalent to hydrochloric acid (a HAP) emissions less than 10 tons per year rolled on a monthly basis from both incinerators. Compliance with the HAP limit shall make

Part 70 (326 IAC 2-7) not applicable.

D.2.4 Medical Waste Incinerator Emission Guideline Exemption [326 IAC 12 and 40 CFR Part 60]

The weight of the fuel feed stream to the two (2) incinerators shall be comprised of ten percent (10%) or less, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. Compliance with the limit and the record keeping requirement in Section D.2.7, qualifies the two (2) incinerators as a "co-fired combustors" as defined by 40 CFR 60.51c and exempts them from 40 CFR Part 60, Subpart Ce.

D.2.5 40 CFR Part 60.2000, Subpart CCCC - Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units [326 IAC 12 and 40 CFR Part 60]

- (a) The weight of the waste feed stream to the 253-1 incinerator shall be comprised of ninety percent (90%) or greater, in aggregate, of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste, as defined in 40 CFR 60.2265, as measured on a calendar quarter basis. As specified in 40 CFR 60.2010(a), due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart CCCC.
- (b) The weight of the waste-feed stream to the 241-1 incinerator shall be comprised of thirty percent (30%) or greater, in aggregate, of municipal solid waste or refuse-derived fuel, as defined in 40 CFR 60 Subpart Ea, Subpart Eb, Subpart AAAA and Subpart BBBB, and the incinerator has the capacity to burn less than 35 tons/day municipal solid waste or refuse-derived fuel, as measured on calendar quarter basis. As specified in 40 CFR 60.2010(a), due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart CCCC.

Compliance Determination Requirements

D.2.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test these incinerators by this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.2.7 Waste Throughput

The Permittee shall maintain records of the following values:

- (a) Total monthly amount of waste burned and annual amount of waste burned to the two (2) incinerators rolled on a monthly basis;
- (b) Total monthly hydrochloric acid emissions and annual hydrochloric acid emissions rolled on a monthly basis;
- (c) The weight on a calendar quarter basis, of hospital waste and medical/infectious waste combusted and the weight of all other fuels and wastes combusted in incinerator 253-1; and
- (d) The weight on a calendar quarter basis of municipal waste combusted, and the weight of all other fuels and waste combusted in incinerator 241-1.

The Permittee shall implement its record keeping requirements in section (c) of this condition sixty (60) days after the issuance of this FESOP.

D.2.8 Quarterly Reporting

A quarterly summary of the information to document compliance with Condition D.2.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. These reports shall include the calendar month amount of waste burned, the calendar month hydrochloric acid emissions, the 12 month rolling total of amount of waste burned and hydrochloric acid emissions, for each month in a reporting period.

The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (c)(1) One (1) No. 2 fuel oil-fired back-up generator (ID# B409) with a heat input capacity of 5.63 million Btu per hour.
- (2) One (1) No. 2 fuel oil fired emergency generator (ID #EMG-TOX) with a heat input capacity of 19.3 million Btu per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

- D.3.1 Sulfur Dioxide (SO₂) and Nitrogen Oxides NO_x [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

The back-up generator (ID# B409) shall have an annual hours of operation limited to 500 hours per twelve (12) consecutive month period, rolled on a monthly basis. Compliance with the limit in the hours of operation shall make 326 IAC 2-2 and 40 CFR 52.21 the Prevention of Significant Deterioration, and 326 IAC 2-7, Part 70 Permit Program not applicable.

Compliance Determination Requirements

- D.3.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test this back-up generator and the emergency generator by this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4]

- D.3.3 Record Keeping Requirements

To document compliance with Condition D.3.1 the Permittee shall maintain records of the times that the B409 back-up generator is operating to document that this generator is not operating at more than 500 hours per twelve (12) consecutive month period, rolled on a monthly basis.

- D.3.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Insignificant activities

- (f) Two (2) no. 2 fuel oil-fired emergency fire pump engines (ID#s FP-B204 and FP-B208), each with a heat input capacity of 0.82 million Btu/hr. These fire pumps do not have an air pollution control device. Fire pump engine FP-B204 exhausts through parallel stacks FP-B204A and FP-B204B. Fire pump engine FP-B208 exhausts through FP-B208A and FP-B208B.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Nitrogen Oxides (NO_x) [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

The two (2) no. 2 fuel oil fired emergency fire pump engines (ID#s FP-B204 and FP-B208) shall each have an annual hours of operation limited to 500 hours per twelve (12) consecutive month period, rolled on a monthly basis. Compliance with the limit shall make 326 IAC 2-2 and 40 CFR 52.21, the Prevention of Significant Deterioration, and 326 IAC 2-7, Part 70 Permit Program not applicable.

Compliance Determination Requirements

D.4.2 Testing Requirements [326 IAC 2-8-4(3)]

The Permittee is not required to test emergency fire pump engines (ID#s FP-B204 and FP-B208) by this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4]

D.4.3 Record Keeping Requirements

To document compliance with Condition D.4.1 the Permittee shall maintain records of the times that each emergency fire pump engines is operating to document that each fire pump engine is not operating more than 500 hours per twelve (12) consecutive month period rolled on a monthly basis.

D.4.4 Reporting Requirements

A summary to document compliance with Condition D.4.1 shall be submitted upon request of the IDEM, OAQ to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the request was made. The report shall include the monthly hours that the pump engines have operated. If a report is requested, the report shall include a certification by the authorized individual.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: insignificant activities:

- (j) Any degreasing operation that does not exceed 145 gallons of solvent usage per 12 months and not subject to 326 IAC 20-6 including, but not limited to the following:
 - (1) One (1) machine shop cold solvent cleaner constructed in 1982; and
 - (2) Two (2) Building G409 cold solvent cleaner constructed after 1990.
 - (3) One (1) Building 254 cold solvent cleaner constructed after 1990.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations (one (1) machine shop cold solvent cleaner; two (2) Building G409 cold solvent cleaners and one (1) Building 254 cold solvent cleaner constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaner degreasers (two (2) Building G409 cold solvent cleaners and one (1) Building 254 cold solvent cleaner) located anywhere in the state of the types described in subdivision (1)(A) through (1)(C) of 326 IAC 8-2-1(b) and construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.

- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when the solvent used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility (two (2) Building G409 cold solvent cleaners) located anywhere in the state of the types described in subdivision (1)(A) through (1)(C) of 326 IAC 8-2-1(b) construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determinations Requirements

D.5.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]
The Permittee is not required to test these degreasers by this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.5.4 Record Keeping and Reporting Requirements
There are no record keeping and recording requirements necessary for the cold solvent cleaners.

SECTION 6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
insignificant activities:

(p) A pharmaceutical production facility (Building 409)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.6.1 Particulate Matter (PM) Emission Limit (Process Operations) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operation), the PM emissions from the pharmaceutical production facility (Building 409) shall be limited to 0.551 pounds per hour at a process weight rate less than 100 pounds per hour.

Compliance Determinations Requirements

D.6.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

There are no stack testing requirements necessary for the pharmaceutical production facility (Building 409).

Record Keeping and Reporting Requirements [326 IAC 2-8-4]

D.6.3 Record Keeping Requirements

There are no record keeping requirements necessary for the pharmaceutical production facility (Building 409).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140
FESOP No.: F059-12151-60001
Facility: Five (5) natural gas/no.2 fuel oil fired boilers (ID#s 254-1, 254-2, 254-3, 254-4, and 262-1) with heat input capacities of 51.0, 63.0, 67.0, 78.0, and 3.2 million Btu per hour, respectively.

insignificant activities:

- (a) one (1) natural gas/no. 2 fuel oil fired boiler (ID# 262-2) with a heat input capacity less than or equal to 1.95 million Btu per hour;
- (b) three (3) natural gas-fired boilers (ID#s 293-1, 229-1 and 229-2), with a heat input capacities less than or equal to 2.1 million Btu per hour.

Parameter: Average sulfur content of no. 2 fuel oil, NOx and SO2 emissions
Limit: 738 million cubic feet of natural gas per 12 consecutive month period, rolled on a monthly basis and 0.35% sulfur content of no. 2 fuel oil; 3,332 kgals of fuel oil per 12 consecutive months rolled on a monthly basis.

Year: _____ Quarter _____

Month	Average sulfur content of fuel oil (%)	Fuel usage per month A. (cubic feet of natural gas) B. (gallons of fuel oil)	Fuel usage for the previous 12 months C. (A+ 200*B) cubic feet
Month 1		A. B.	C.
Month 2		A. B.	C.
Month 3		A. B.	C.

Note: 200 cubic feet of natural gas is equivalent to 1 gallon of #2 distillate fuel oil.

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140
FESOP No.: F059-12151-60001
Facility: (a) one (1) natural gas, multi chamber, Brule incinerator (ID# 253-1) with a heat input capacity of 3.9 million Btu per hour and
(b) one (1) natural gas, multi chamber, Consumat incinerator (ID# 241-1) with a heat input capacity of 2.8 million Btu per hour.
Parameter: total waste throughput and hydrochloric acid (HCl) emissions
Limit: Less than 591 tons of waste per 12 consecutive month period, rolled on a monthly basis and
Less than 10 tons of HCl per 12 consecutive month period rolled on a monthly basis.

Year: _____ Quarter _____

Month	waste throughput per month (tons)	waste throughput for the previous 12 months (tons)	HCl emissions per month (tons)	HCl emissions for the previous 12 months (tons)
Month 1				
Month 2				
Month 3				

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140
FESOP No.: F059-12151-60001
Facility: Back -up generator (ID # B409)
Limit: 500 hours per twelve (12) month period, rolled on a monthly basis.

YEAR: _____ Quarter _____

Month	Column 1	Column 2	Column 1 + Column 2
	Hours Operated This Month	Hours Operated Previous 11 Months	Hours Operated 12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140
FESOP No.: F059-12151-60001

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify) _____

☐ Report (specify) _____

☐ Notification (specify) _____

☐ Affidavit (specify) _____

☐ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140
FESOP No.: F059-12151-60001

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <p>9 This is an emergency as defined in 326 IAC 2-7-1(12)
C For an emergency lasting one hour or more, the Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
C For an emergency lasting one hour or more the Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16</p> |
|--|

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140
FESOP No.: F059-12151-60001

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel
From To

(can omit identification of boiler affected if only one gas boiler at this plant)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140
FESOP No.: F059-12151-60001

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

Addendum to the
Technical Support Document for Federally Enforceable State Operating Permit
(FESOP) Renewal

**Eli Lilly and Company
2001 West Main Street
Greenfield, Indiana 46140
F-059-12151, Plt ID-059-00001**

On March 1, 2002 the Office of Air Quality (OAQ) had a notice published in the Daily Reporter, Greenfield, Indiana, stating that Eli Lilly and Company had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a pharmaceutical research facility. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 1, 2002 Eli Lilly and Company submitted comments on the proposed FESOP Renewal. The summary of the comments is as follows (changes are **bolded** and deletions are ~~struck-through~~ for emphasis):

Comment 1: Paul Gilson is team leader of Environmental Services. Please drop "Control and" from his title.

Response 1: Section A.1 General Information [326 IAC 2-8-3(b)], was revised to reflect your comment as follows:

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary pharmaceutical research source.

Authorized individual:	David R. O'Donnell, Manager Plant Engineering, Maintenance and Utilities or Paul Gilson, Team Leader, Environmental Control and Services
Source Address:	2001 West Main Street, Greenfield, Indiana 46140
Mailing Address:	P.O. Box 708, Greenfield, Indiana 46140
SIC Code:	2834 and 2879
County Location:	Hancock County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules;

Comment 2: Condition A.3(f): Please correct paragraph numbering.

Response 2: The formatting changed when the draft documents were converted into Word and e-mailed to you, however the draft hardcopy does not have this formatting problems.

Comment 3: Please add reference to applicable requirements for this insignificant activity as noted in

redlined version attached.

Response 3: The following statement was added in Section A.3(j) "These insignificant activities have applicable requirements in D.5".

Comment 4: Condition B.8(c): See redlined clarification regarding confidentiality claims for documents furnished to EPA.

Response 4: Condition B.8(c) has been changed to reflect your comments as follows:

B.8(c) Upon written request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the ~~furnished~~ records **furnished to EPA**, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

Comment 5: Condition B.12(c)(5): Lilly is seeking certainty regarding the sufficiency of its compliance certification report. Lilly requests the addition of the following sentence after the existing language in that condition."IDEM, OAQ will notify Permittee in writing to specify the requested additional facts needed to determine compliance status of the source."

Response 5: Condition B.12(c)(5) was revised to include the statement requested:

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source. **IDEM, OAQ will notify Permittee in writing to specify the requested additional facts needed to determine compliance status of the source.**

Comment 6: Condition B.13(c): To clarify the level at which lack of maintenance triggers revision of a Preventive Maintenance Plan, please make the following change: after "whenever lack of proper maintenance causes or" replace "contributes" with " is the primary contributor".

Response 6: Condition B.13(c) was revised to insert the words requested:

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or **is the primary contributor** ~~contributes~~ to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Comment 7: Condition B.19(e): Please correct paragraph numbering.

Response 7: The formatting changed when the draft documents were converted into Word and e-mailed to you, however the draft hardcopy does not have this formatting problems.

Comment 8: Conditions C.3, C.4, C.5 and C.6: Please make redlined changes regarding federal enforceability and minor language changes regarding asbestos abatement as noted in attached redlines version of FESOP.

Response 8: Federal law states that failure to comply with any permit condition issued under a

program that has been approved into a State Implementation Plan (SIP) is to be treated as a violation of the SIP (40 CFR 52.23). This has the effect of making all FESOP conditions federally enforceable. Indiana's FESOP program was approved as a part of Indiana's SIP at 40 CFR 52.788. Neither the program nor the underlying rule, 326 IAC 2-8 contains provisions for designating certain conditions as not federally enforceable.

No changes were made to Condition C.3, C.4, and C.5 to note "not federally enforceable". No changes were made to Condition C.6. to add "or off", since this condition was verbatim from the rule.

Comment 9: Condition C.12(b)(2-4): Please correct paragraph numbering.

Response 9: The formatting changed when the draft documents were converted into Word and e-mailed to you, however the draft hardcopy does not have this formatting problems.

Comment 10: Condition D.1.3: Please insert "326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable". Are previous versions of these rules federally enforceable? If previous versions are federally enforceable, please reference in the permit.

Response 10: 326 IAC 7-1, old version of 326 IAC 7-1.1 and 326 IAC 7-1-3.1, old version 326 IAC 7-2-1 were approved into the State Implementation Plan (SIP) on April 1, 1988 and November 1, 1987 respectively. The new versions of these rules were not approved into the SIP. Federal law however, states that failure to comply with any permit condition issued under a program that has been approved into a State Implementation Plan (SIP) is to be treated as a violation of the SIP (40 CFR 52.23). This has the effect of making all FESOP conditions federally enforceable. Indiana's FESOP program was approved as a part of Indiana's SIP at 40 CFR 52.788. Neither the program nor the underlying rule, 326 IAC 2-8 contains provisions for designating certain conditions as not federally enforceable.

No change was made to Condition D.1.3.

Comment 11: Condition D.1.7: Please add "pertaining to the combustion of fuel oil only". At the end of the existing language.

Response 11: Since IDEM would require the PMP for the boilers when burning fuel oil only, Condition D.1.7 Condition was revised as follows:

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boilers IDs 254-1, 254-2, 254-3 and 254-4 **pertaining to the combustion of fuel oil only.**

Comment 12: Condition D.1.10: Please replace " when exhausting to the atmosphere" with "while combusting fuel".

Response 12: Condition D.1.10 Visible Emission Notations was revised to reflect you comment as follows:

D.1.10 Visible Emissions Notations

(a) Visible emission notations of the boilers IDs 254-1, 254-2, 254-3 and 254-4 stack exhausts shall be performed once per shift during normal daylight operations ~~when~~

~~exhausting to the atmosphere~~ **while combusting fuel oil.** A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Comment 13: Condition D.1.11(a): Please correct paragraph numbering.

Response 13: The formatting changed when the draft documents were converted into Word and e-mailed to you, however the draft hardcopy does not have this formatting problems.

Comment 14: Condition D.1.12(b): Please delete condition. The regulatory authority for this requirement is not apparent. This condition is duplicative of Condition D.1.12. Other permit requirements provide the data relating to operation on alternate fuel.

Response 14: Section (b) of Condition D.1.12 Natural Gas Certification: This is required for all boilers in Section D.1. to certify that only natural gas was burned which is a cleaner fuel, and therefore no visible emission notation or other type of monitoring is required.

Comment 15: Condition D.2.4 and D.2.5 (a) and (b): References to D.2.7 Recordkeeping Requirements should be corrected to refer to D.2.8 Recordkeeping Requirements.

Response 15: Since the Visible Emission Notation requirement was deleted due to low emissions, conditions that follows it were renumbered accordingly.

Comment 16: Condition D.2.5(b): Please correct paragraph numbering.

Response 16: The formatting changed when the draft documents were converted into Word and e-mailed to you, however the draft hardcopy does not have this formatting problems.

Comment 17: Condition D.2.5(b): Please change " and that have the capacity" to "and the incinerator has the capacity".

Response 17: Condition D.2.5(b) was revised as follows:

D.2.5(b) The weight of the waste-feed stream to the 241-1 incinerator shall be comprised of thirty percent (30%) or greater, in aggregate, of municipal solid waste or refuse-derived fuel, as defined in 40 CFR 60 Subpart Ea, Subpart Eb, Subpart AAAA and Subpart BBBB, ~~and that have the incinerator has~~ the capacity to burn less than 35 tons/day municipal solid waste or refuse-derived fuel, as measured on calendar quarter basis. As specified in 40 CFR 60.2010(a), due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart CCCC.

Comment 18: Condition D.2.7: Please delete this section requiring visible emission notations for the

incinerators.

Response 18: IDEM agrees that the VE readings for the incinerators can be removed from the permit due to the low emissions. Lilly should be aware that the annual compliance certification requirements include a requirement to state the methods used to determine the compliance status of the source. Without VE readings, Lilly will have to state the other methods that have been used to determine the compliance status of the incinerators with 326 IAC 5-1 and the particulate limit from 4-2. Condition D.2.7 has been deleted in the final permit.

Comment 19: Condition D.3 Facility Description: Please correct paragraph numbering

Response 19: Section D.3 Facility Description as written reflects the correct numbering. Therefore, no change was made in the permit.

Comment 20: Condition D.3.3: Please insert "B409" before "backup generator".

Response 20: Condition D.3.3 was revised to reflect your comment as follows:

D.3.3 Record Keeping Requirements

To document compliance with Condition D.3.1 the Permittee shall maintain records of the times that the **B409** back-up generator is operating to document that this generator is not operating at more than 500 hours per twelve (12) consecutive month period, rolled on a monthly basis.

Comment 21: Condition D.5.2(b): Please replace "one (1) Building G409 cold solvent cleaner" with two (2) Building G409 cold solvent cleaners".

Response 21: Condition D.5.2(b) was revised as follows:

D.5.2(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility (~~one~~ **two** (+ 2) Building G409 cold solvent cleaners) located anywhere in the state of the types described in subdivision (1)(A) through (1)(C) of 326 IAC 8-2-1(b) construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

Comment 22: Section D.6: Please delete this section. The emissions rate for the pharmaceutical production facility (Building 409) is below 0.551 lbs/hr so the process weight rule does not apply.

Response 22: Under the existing rule 326 IAC 6-3, this pharmaceutical production facility (Building 409) is regulated. Please see previous responses on page 38 of 54 of the Technical Support Document (TSD).

The proposed change in the rule 326 IAC 6-3 will exempt manufacturing processes with potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour. Since this change in the rule is still not in effect, Section D.6 will stay.

Comment 23: FESOP Emergency Occurrence Report: Please insert "working" after "For an emergency lasting one hour or more the Permittee must submit notice in writing or by facsimile within two (2).

Response 23: The word "working" was inserted in the FESOP Emergency Occurrence Report as follows:

9 This is an emergency as defined in 326 IAC 2-7-1(12)
C For an emergency lasting one hour or more, the Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
C For an emergency lasting one hour or more the Permittee must submit notice in writing or by facsimile within two (2) **working** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

Comment 24: Natural Gas Fired Boiler Certification: Please delete this report. It is duplicative of the FESOP Quarterly Report. The need for this report is not apparent to Lilly. Lilly would be willing to discuss this matter further to resolve this issue.

Response 24: Please see Response 14.

Technical Support Document:

Comment 1: Pages 3 and 7: The application was submitted on March 12, 2001 and not on April 11, 2000 as written.

Response 1: IDEM, OAQ record shows that the application was submitted on April 11, 2000. Therefore, no changes were made to the pages mentioned.

Comment 2: Miscellaneous: Please make any other noted changes in the attached redlined copy of the permit supporting documents though not included in this cover letter.

Response 2: The Technical Support Document will remain unchanged to show the original determination made in the permit. All the resulting changes to the TSD due to the source comments should have been addressed and noted in this TSD Addendum.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document for the Federally Enforceable State Operating Permit (FESOP) Renewal

Source Background and Description

Source Name: Eli Lilly and Company, Greenfield Laboratories
 Source Location: 2001 West Main Street, Greenfield, Indiana 46140
 County: Hancock
 Original FESOP: 059-5580-00001 Issuance Date: December 13, 1996
 FESOP: 059-12151-00001
 SIC Code: 2834, 2879
 Permit Reviewer: Aida De Guzman

The Office of Air Quality (OAQ) has reviewed a FESOP application from Eli Lilly and Company, relating to the operation of a pharmaceutical research facility (Greenfield Laboratories). Eli Lilly and Company was issued FESOP 059-5580-00001 on December 13, 1996 for the following:

Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

(a) Five (5) boilers

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
5	natural gas/no. 2 fuel oil fired boiler (ID#s 254-1, 254-2, 254-3, 254-4, and 262-1) with heat input capacities of 51.0, 63.0, 67.0, and 78.0, and 3.2 million Btu per hour, respectively	none	254-1, 254-2, 254-3, 254-4, and 262-1

(b) Two (2) incinerators

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
1	natural gas-fired, multi chamber, Brule incinerator (ID# 253-1) with a heat input capacity of 3.9 million Btu per hour	none	253-1
1	natural gas-fired, multi chamber, Consumat incinerator (ID# 241-1) with a heat input capacity of 2.8 million Btu per hour.	none	241-1

- (c) Two (2) each 500 hours per year, no.2 fuel oil-fired back-up and emergency generators

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
1	No. 2 fuel oil fired back-up generator (ID# 409) with a heat input capacity of 5.63 million Btu per hour	none	0
1	No. 2 fuel oil fired emergency generator (ID #EMG-TOX) with a heat input capacity of 19.3 million Btu per hour	none	0

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) One (1) natural gas/no. 2 fuel oil-fired boiler (ID# 262-2), with a heat input capacity less than or equal to 1.95 million Btu per hour (Note: This insignificant activity has applicable requirements in section D.1);
- (b) Three (3) natural gas-fired boilers (ID#s 293-1, 229-1, and 229-2), with heat input capacities less than or equal to 2.1 million Btu per hour **(Note: These insignificant activities have applicable requirements in section D.1);**
- (c) Seven (7) no. 2 fuel oil-fired emergency generators (ID#s 226, 240, 241-out, 254a, 254b, 291, and 418), each with a heat input capacity less than or equal to 3.75 million Btu per hour;
- (d) Fifteen (15) natural gas-fired emergency generators (ID#s 206, 223, 229, 235, 241-penthouse, 244, 245, 246, 276, 288, 292, 296, 417, 428-east, and 428-west), each with a heat input capacity less than or equal to 0.66 million Btu per hour;
- (e) Three (3) propane-fired emergency generators (ID#s 212, 290, and 248), each with a heat input capacity less than or equal to 0.42 million Btu per hour;
- (f) **Two (2) no. 2 fuel oil fired emergency fire pump engines (ID#s FP-B204 and FP-B208), each with a heat input capacity of 0.82 million Btu/hr. (Note: These insignificant activities have applicable requirements in D.4);**

- (g) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (h) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (i) One (1) fuel oil storage tank (ID# 254-F) with a capacity of 250,000 gallons;
- (j) Any degreasing operation that does not exceed 145 gallons of solvent usage per 12 months and not subject to 326 IAC 20-6, including, but not limited to the following:
 - (1) One (1) machine shop cold solvent cleaner constructed in 1982;
 - (2) **Two (2)** Building G409 cold solvent cleaner constructed after 1990; and
 - (3) **One (1) Building 254 cold solvent cleaner constructed after 1990.**
- (k) Activities associated with the transportation and treatment of sanitary sewage (on-site sewage treatment facility);
- (l) Asbestos abatement projects regulated by 326 IAC 14-10;
- (m) On-site fire and emergency response training approved by IDEM;
- (n) Laboratories as defined in 326 IAC 2-7-1;
- (o) Farm operations; and
- (p) A pharmaceutical production facility (Building 409).

History

On December 30, 1996, Lilly made a petition for an administrative review and a request for stay of effectiveness to its original FESOP. This FESOP will address the source issues and comments made in the petition, and comments made outside of the appeal. This FESOP will also include operational changes made in the permit application submitted on April 11, 2000.

The following were the issues raised in the petition:

- (a) IDEM arbitrarily refuses to create restrictions that are based on 12-month rolling limits with numerical values at, or just below, major source thresholds. IDEM's interpretation regarding these restrictions result in unnecessarily stringent allowable emissions and record keeping requirements. The FESOP conditions affected by this interpretation should refer to 12 consecutive months rather than 365 consecutive days. Condition D.2.3 should be revised from 9.2 tons HCL per 12 month period to 9.9 tons per 12 - month period, and from 547 tons of waste to 590 tons of waste per 12-month period.
- (b) IDEM has arbitrarily imposed limitations on the hours of operation for emergency

generators, with corresponding record keeping requirements to demonstrate compliance with the limitations. These limitations and record keeping obligations are not necessary under the governing federal regulations, state rules, or current EPA policy interpreting these laws. Sections D.3 and D.4 should be deleted from the FESOP, or in the alternative, the restriction on the higher heating value of fuel oil combusted in the emergency generators should be revised to be technically correct.

- (c) The references to higher heating value in conditions D.5.2, D.5.5, D.4.2, and D.6.6 require technical revisions. The references to higher heating value should be deleted from these conditions, or revised to be technically correct.
- (d) Condition B.24, item (e), should be deleted as it allows inspectors to use photographic, recording, testing, monitoring and other equipment with no procedures for protecting confidential information which might be obtained and removed from the facility.

Lilly petitioned for a stay of effectiveness of this condition.

- (e) Condition C.8, items (a) and (c), should be deleted. These conditions, which require certain equipment be "properly operated" or "maintained in proper operating condition," are in excess of statutory authority and overly vague. The conditions deprive Lilly of due process because Lilly is unable to determine the standards by which it will be regulated.

Lilly petitioned for a stay of effectiveness of these items.

- (f) Condition C.8, item (b), should be deleted. This condition, which requires that air pollution control equipment be in operation at all times the emitting equipment is in operation, is in excess of statutory authority. In addition, it is in contravention of sound public policy as it places unnecessary requirements upon the air pollution control requirement which is voluntarily operated at the Greenfield facility.

Lilly petitioned for a stay of effectiveness of this condition.

- (g) The corrective action provisions of condition B.13 should not apply to the equipment in sections D.1, D.2, D.5, D.6, D.7, and D.8. The corrective action requirements found in condition B.13, items (a)(3) and (a)(4), are inappropriate in the context of the equipment cited in the above sections and should be deleted. In addition, the requirement for corrective action plans in effect imposes compliance monitoring provisions for certain units in contravention to IDEM policy.

Lilly petitioned for a stay of effectiveness of condition B.13 as it applies to the above equipment.

- (h) Condition B.13 creates new requirements for “preventive maintenance plans”, but provides no time period for the preparation of such plans. Condition B.13 should include language which allows 90 days for the preparation and implementation of “preventive maintenance plans”.

Lilly petitioned for a stay of effectiveness of the requirements of condition B.13 as they relate to the preparation and implementation of “preventive maintenance plans”.

- (i) Condition C.18, items (c)(4) through (c)(9), should be deleted as they are in excess of statutory authority. In the alternative, these requirements should be restricted to monitoring equipment.

Lilly petitioned for a stay of effectiveness of these conditions.

- (j) Condition C.17 requires in part that records be kept of the times that equipment is not operating. This requirement places arbitrary and unnecessary record keeping requirements upon Lilly. This portion of condition C.17 should be deleted, or alternatively, the entire condition should be deleted.

Lilly petitioned for a stay of effectiveness of this portion of condition C.17.

- (k) Conditions C.13, C.15, and C.16 are unnecessary and arbitrary as they are inapplicable in the context of the equipment in use at the Greenfield facility.

Lilly petitioned for a stay of effectiveness of these conditions.

- (l) Several minor revisions as follows:

- (1) Section A.3(1) of the FESOP correctly states that the source includes degreasing operations that are insignificant activities. However, the permit does not contain conditions to implement the applicable requirement found at 326 IAC 8-3 and Lilly requests that such conditions be inserted.
- (2) The Building 409 pharmaceutical production operations were listed in the permit application and the permit as insignificant activities. The process weight rate for a freeze drying operation in Building 409 is less than 100 pounds per hour, and potential uncontrolled particulate matter emissions are estimated to be less than 1 pound per day. It is not clear to Lilly whether the FESOP should contain a condition listing the process weight rule, 326 IAC 6-3-2, as an applicable requirement for the Building 409 freeze dryer. Although the text of the process weight rule does not have an explicit de minimis applicability level, Lilly believes, however, that 326 IAC 6-3-2 does not apply to operations with a process weight rate less than 100 pounds per hour.
- (3) Condition C.6, citing 326 IAC 14-10 and 18-1, requires that Lilly use an Indiana accredited asbestos inspector to inspect a facility before it is renovated or demolished. Lilly requests that this condition be revised as follows:

- (A) The condition should cite to the federal rule at 40 CFR part 61, Subpart M as well as the state rule.
- (B) The condition should cite to 326 IAC 18-3 instead of 326 IAC 18-1.
- (C) The condition should include a sentence that states that the requirement that the inspector be Indiana accredited is not federally enforceable.
- (4) Condition C.7 contains a broad reference to 40 CFR part 82, the regulations for ozone depleting substances. Lilly requests that the words "as applicable" be inserted before the last sentence ends to reflect the fact that some of part 82 may not apply.
- (5) The last sentence of condition D.1.11 provides, "Records of sulfur content and higher heating value shall be determined by information as obtained by the vendor." Lilly believes that sentence should read "Records of sulfur content and higher heating value shall consist of the information provided by the vendor if the Permittee chooses to demonstrate compliance with that information." Such a revision will eliminate the potential inconsistency between the record keeping requirement in condition D.1.10, which allows Lilly to use vendor information, and the reporting requirement in condition D.1.11, which could be read as requiring Lilly to use vendor information.
- (6) The last sentence of condition D.5.7 and the opening clause of Section A.2(c) should refer to "backup generator" rather than "emergency generator." The opening clause should also list the generator as "oil-fired" rather than "natural gas-fired."
- (7) Revise conditions B.14, items (b)(4), (b)(5), and (f), to provide that the four-hour and two-day time periods for reporting period begin upon discovery of the emergency, rather than at the beginning of the emergency. This change is consistent with an amendment to 326 IAC 2-7 and 2-8 adopted at the December 1996 meeting of the Indiana Air Pollution Control Board.
- (8) Revise condition D.1.5 to eliminate the limit on higher heating value of fuel oil because it is irrelevant for purposes of demonstrating compliance with the 12-month rolling SO₂ limit for the boilers. Restricting the sulfur content and gallons of fuel combusted, as this term does, is sufficient to restrict SO₂ emissions. The higher heating value of the fuel oil does not affect SO₂ emissions when sulfur content and number of gallons are restricted. Furthermore, for the range of higher heating values common in this area, limiting fuel sulfur content to 0.35% will ensure that under no circumstances will the short term SO₂ emission exceed the SIP limit of 0.50 pounds per million British Thermal Units.
- (9) Should IDEM agree with requested revision no. 8, the references to higher heating value in conditions D.1.10 and D.1.11 should be eliminated. Alternatively, the reference to higher heating value in the last sentence of condition D.1.10 should be revised to be technically correct.
- (10) Delete the last sentence of the first paragraph of condition D.4.1. It appears to

be redundant to the next sentence in the condition, which is a more precise statement.

- (11) Several of the conditions which contain emission limitations must be revised slightly because of discovered calculation errors or because the emission rate in the permit does not match the emissions in Appendix A to the Technical Support Document of the permit.
- (12) The word “and” at the end of condition B.12, item (c)(4) appears to be a typographical error.
- (13) Conditions C.5 and C.10 implement the National Emission Standard for Radionuclide Emissions from Facilities Licensed by the Nuclear Regulatory Commission, 40 CFR Part 61, Subpart I. At the time the permit was issued, an EPA proposal to rescind that rule was pending, and IDEM provided that conditions C.5 and C.10 expire on the effective date of EPA’s rescission. That rule has since taken effect. 61 Federal Register 68972 (December 30, 1996). Lilly suggests that IDEM delete conditions C.5 and C.10 because they no longer have any effect.

In addition to the above unresolved issues in the appeal, the source has requested the following operational changes submitted on April 11, 2000. The appeal and the request for operational changes will be both be addressed in this FESOP:

Source’s Request 1:

The source requests a revision to the fuel limitation for the nine (9) boilers, two (2) waste incinerators, one (1) generator, and two (2) fire pumps established in the original FESOP F059-5580-00001, issued on December 13, 1996. This revision will provide a 10 ton per year “cushion” for adding insignificant activities. Adding the “cushion” to the permit will change the natural gas limitation, and the allowable NOx emissions. Likewise, the #2 fuel oil will be changed and the corresponding SO2 emissions limit.

As a result of these changes, Lilly seeks the following limits in the FESOP:

Emissions Unit	Proposed Limit(s)	Operational Restrictions	Comments
Boilers • 6 natural gas/fuel oil; • 3 natural gas only	• NOx = 36.9 tons/yr • SO2 = 82.8 tons/yr	• Natural gas usage limit = 738.0 mmcf/yr	• Limits derived after limits for other units and site “cushion” determined.
• 2 Waste Incinerators	• HCL = 9.9 tons/yr	• Combined waste throughput limit = 591 tons/yr	
• B409 Generator	• NOx = 6.2 tons/yr • SO2 = 0.4 ton/yr	• Operation limited to 500 hours/yr	

• 2 Fire Pumps	• NOx = 1.8 tons/yr • SO2 = 0.2 ton/yr	• Operation limited to 500 hours/yr (each unit)	• SO2 limit must be 0.1 ton/yr per unit. • IDEM proposed limit of 0.1 ton/yr for both units restricts operation of fire pumps to significantly less than 500 hours per year per unit.
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Responses to the Issues in the Appeal:

The following changes based on the above comments and requests were agreed to by OAQ and Lilly:

- (a) IDEM agrees that emission limitations based on a 12 consecutive month period rolled on a monthly basis, instead of a 365 consecutive day period rolled on a daily basis, and without a further reduction of 1/12th of the emissions are sufficient to comply with the underlying FESOP requirement of limiting potential to emit.

To address Lilly's request 1, the FESOP was revised to add a 10 tons/yr cushion to the permit. Adding the cushion to the permit will change Condition D.1.1 limits from 1,038 million cubic feet of natural gas per year (mmcf/yr) to 738 mmcf/yr. The higher natural gas usage reflects the most updated AP-42 emission factor, Supplement D March, 1998 which has a lower NOx emission factor, EF of 100 lb/mmcf versus the AP-42, 1995 version which has NOx EF of 140 lb/mmcf.

Condition D.1.5 limits of 3,556 kilogallons (kgal/yr) of #2 fuel oil per year will be changed to 3,332 kgal. Changes are as follows (changes are bolded and deletions are struck-through for emphasis):

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) Five (5) natural gas/no.2 fuel oil fired boilers (ID#s 254-1, 254-2, 254-3, 254-4, and 262-1 with heat input capacities of 51.0, 63.0, 67.0, 78.0, and 3.2 million Btu per hour, respectively. These boilers do not have any air pollution control devices and each one exhausts through stack 254-1, 254-2, 254-3, 254-4, and 262-1, respectively.

Insignificant activities:

- (a) one (1) natural gas/no. 2 fuel oil fired boiler (ID #262-2), with a heat input capacities less than or equal to 1.95 million Btu per hour;
- (b) three (3) natural gas-fired boilers (ID#s 293-1, 229-1 and 229-2) with heat input capacities less than or equal to 2.1 million Btu per hour;
- ~~(a) one (1) no. 2 fuel oil-fired boiler (ID# 418), with a heat input capacity of 0.72 million Btu per hour.~~

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Nitrogen Oxides (NO_x) From the ~~Ten~~ **Nine** Boilers

~~That~~ The total usage of natural gas as the primary fuel for all ~~eight (8)~~ **nine (9)** boilers including the insignificant units (i.e., boilers 262-2, 293-1, 229-1, and 229-2 ~~and 418~~) shall be limited to ~~4,038~~ **738.0** million cubic feet per twelve consecutive month period, rolled on a monthly basis (Note: For every gallon of #2 distillate fuel oil used, ~~143~~ **200** cubic feet of natural gas shall be deducted from this limit.). This fuel usage limitation ~~was taken by the company and is equivalent to~~ **is necessary to limit the potential to emit** NO_x emissions of ~~72.7~~ **36.9** tons per 12 consecutive month period, rolled on a monthly basis from all boilers only. ~~The NO_x emissions from other facilities is 19.8 tons per year rolled on a monthly basis. This limit~~ Due to, shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) ~~rules do not apply~~ **icable**.

D.1.5 Sulfur Dioxide (SO₂) Emissions From the ~~Ten~~ **Nine** Boilers

That the total usage of no.2 fuel oil for all ~~ten (10)~~ **nine (9)** boilers including the insignificant units (i.e., boilers 262-2, 293-1, 229-1, ~~and 229-2 and 418~~) shall be limited to ~~3,556~~ **3,332.0** kilogallons per 12 consecutive month period rolled on a monthly basis. ~~This shall limit the fuel usage limitation is necessary to limit the potential to emit~~ SO₂ emissions to ~~89.2~~ **82.8** tons per 12 consecutive month period rolled on a monthly basis ~~from for~~ the boilers only. In order for the source-wide SO₂ emissions to not exceed the **Part 70** emission limit **threshold of 100 tons per year**, the sulfur content of the no. 2 fuel shall not exceed 0.35 % sulfur content ~~at a higher heating value of 0.14~~

~~million Btu per gallon. Compliance with~~ Due to the SO₂ limit, **shall make the**
Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70
(326 IAC 2-7) rules ~~do not apply~~ **icable**.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

(b) Two (2) ~~medical waste~~ incinerators:

- (1) one (1) natural gas-fired, multi chamber, Brule incinerator (ID# 253-1) with a natural gas heat input capacity of 3.9 million Btu per hour. This incinerator does not have any air pollution control device and exhausts through stack 253-1.
- (2) one (1) natural gas-fired, multi chamber, Consumat incinerator (ID# 241-1) with a natural gas heat input capacity of 2.8 million Btu per hour. This incinerator does not have any air pollution control device and exhausts through stack 241-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 *No Change*

D.2.2 *No Change*

D.2.3 Hydrochloric Acid (a HAP)

That the total annual waste throughput to the two (2) incinerators shall ~~be limited to not exceed a total of 547 591 tons per twelve (12) consecutive month period, rolled on a monthly basis. This limitation was taken by the company and is equivalent to a potential to emit hydrochloric acid (HAP) emissions of 9.2 less than 10 tons per year rolled on a monthly basis from both incinerators.~~ **Compliance with** Due to the HAP limit **shall make the Part 70 (326 IAC 2-7) rules do not apply **icable**.**

The following conditions were added in Section D.2:

D.2.4 Medical Waste Incinerator Emission Guideline Exemption

The weight of the fuel feed stream to the two (2) incinerators shall be comprised of ten percent (10%) or less, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. Compliance with the limit and the record keeping requirement in Section D.2.7, qualifies the two (2) incinerators as "co-fired combustors" as defined by 40 CFR 60.51c and exempts them from 40 CFR Part 60, Subpart Ce.

D.2.5 40 CFR Part 60.2000, Subpart CCCC - Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units

- (a) The weight of the waste feed stream to the 253-1 incinerator shall be comprised of ninety percent (90%) or greater, in aggregate, of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste, as defined in 40 CFR 60.2265, as measured on a calendar quarter basis. As specified in 40 CFR 60.2010(a), due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart CCCC
- (b) The weight of the waste-feed stream to the 241-1 incinerator shall be comprised of thirty percent (30%) or greater, in aggregate, of municipal solid waste or refuse-derived fuel, as defined in 40 CFR 60 Subpart Ea, Subpart Eb, Subpart AAAA and Subpart BBBB, and that have the capacity to burn less than 35 tons/day municipal solid waste or refuse-derived fuel, as measured on calendar quarter basis. As specified in 40 CFR 60.2010(a), due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart CCCC.

Compliance Determination Requirements

D.2.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

There are no testing requirements necessary for these facilities.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.2.7 Waste Throughput

The Permittee shall maintain records of the following values:

- (a) Total monthly amount of waste burned and annual amount of waste burned to the two (2) incinerators rolled on a monthly basis;
- (b) Total monthly hydrochloric acid emissions and annual hydrochloric acid emissions rolled on a monthly basis;
- (c) The weight on a calendar quarter basis, of hospital waste and medical/infectious waste combusted and the weight of all other fuels and wastes combusted in incinerator 253-1; and
- (d) The weight on a calendar quarter basis of municipal waste combusted, and the weight of all other fuels and waste combusted in incinerator 241-1.

The Permittee shall implement its record keeping requirements in section (c) of this condition sixty (60) days after the issuance of this FESOP.

D.2.8 Quarterly Reporting

~~That A semi-annual~~ **quarterly** summary of the information to document compliance with Condition D.2.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. These reports shall include the calendar month amount of waste burned, the calendar month hydrochloric acid emissions, the 12 month rolling total of amount of waste burned and hydrochloric acid emissions, for each month in a reporting period.

The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Section D.5 in the original permit, now Section D.3 is revised as follows:

SECTION D.5 3 FACILITY OPERATION CONDITIONS

D.5.3.1 Sulfur Dioxide (SO₂) and Nitrogen Oxides NO_x)

~~That the annual hours of operation of the above back-up generator~~ **The back-up generator (ID# B409) shall have an annual hours of operation** limited to 500 hours ~~per 365 consecutive day~~ **twelve (12) consecutive month period, rolled on a monthly basis.** Compliance with the limit in the hours of operation shall make **326 IAC 2-2 and 40 CFR 52.21, the Prevention of Significant Deterioration, and 326 IAC 2-7, Part 70 Permit Program not applicable.** ~~Due to the above SO₂ and NO_x limits, the Prevention of Significant Deterioration, and Part 70 (326 IAC 2-7) rules do not apply.~~

D.5.2 Sulfur Dioxide (SO₂)

~~That the~~ ~~The sulfur content and higher heating value of the no. 2 fuel oil used for the back-up generator (ID# 409) shall not exceed 0.5 percent and 140,000 million-Btu per gallon respectively. Together with Condition D.5.3.1, this shall limit the SO₂ emissions to 0.4 tons per 365 consecutive day period~~ **twelve (12) consecutive month period, rolled on a monthly basis.** Compliance with this limit shall make **326 IAC 2-2, the Prevention of Significant Deterioration, and 326 IAC 2-7, Part 70 Permit Program not applicable.**

~~Therefore, the prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules do not apply.~~

D.5.3 2 Testing Requirements **[326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]**

The Permittee is not required to test this back-up generator and the emergency generator by this permit

All subsequent conditions in this section will be re-numbered accordingly.

Section D.6 in the original permit, now Section D.4 is revised as follows:

SECTION D.6 4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

~~insignificant activities:~~

- (d) Two (2) no. 2 fuel oil fired emergency fire pump engines (ID#s FP-B204 and FP-B208), each with an output power rating of 121 horsepower. These fire pumps do not have an air pollution control device. Fire pump engine FP-B204 exhausts through parallel stacks FP-B204A and FP-B204B. Fire pump engine FP-B208 exhausts through FP-B208A and FP-B208B.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D. 6.4.1 Nitrogen Oxides (NO_x)

~~That the operating hours of each fire pump engine shall be limited to 500 per 365 consecutive day period. This limitation was taken by the company and is equivalent to a total NO_x emissions of 1.9 tons per year rolled on a monthly basis from the fire pump engines. Due to the above NO_x limit, will make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules do not apply.~~

The two (2) no. 2 fuel oil fired emergency fire pump engines (ID#s FP-B204 and FP-B208) shall each have an annual hours of operation limited to 500 hours per twelve (12) consecutive month period, rolled on a monthly basis. Compliance with this limit shall make 326 IAC 2-2, the Prevention of Significant Deterioration, and 326 IAC 2-7, Part 70 Permit Program not applicable.

~~D.6.4.2 Sulfur Dioxide (SO₂)~~

~~That the sulfur content and higher heating value of the no. 2 fuel oil used for the fire pump engines (ID#s FP-B204 and FP-B208) shall not exceed 0.5 percent and 140,000 million Btu per gallon, respectively. Together with condition D.4.3 this shall limit the SO₂ emissions from these emergency generators to 0.1 2 ton per 365 consecutive day period. Compliance with the above condition Therefore shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules do not apply icable.~~

~~D.6.3 Sulfur Dioxide (SO₂)~~

~~That the operating hours limitation under the operation condition D.6.1 shall limit the total SO₂ emissions from the fire pump engines to 0.1 ton per 365 consecutive day period. Therefore the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and part 70 (326 IAC 2-7) rules do not apply.~~

~~D.6.4.3 Sulfur Dioxide (SO₂)~~

~~That The Permittee is not required operating hours limitation under operation condition D.4.1 shall limit the total SO₂ emissions from the fire pump engines to 0.1 2 tons per year rolled on a monthly basis. Compliance with the above condition Therefore and the limits in conditions D.1.5, D.5.1, now D.3.1, D.5.2 now D.3.2, and D.6.2 now D.4.2 will~~

~~make Therefore, the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules do not apply icable.~~

D.6.4.2 Testing Requirements [326 IAC 2-8-4(3)]

The Permittee is not required to test emergency fire pump engines (ID#s FP-B204 and FP-B208) by this permit.

Subsequent conditions in this section shall be re-numbered accordingly

- (b) D.5 2, now D.3.2; D.5.4, now D.3.4; D.6.2, now D.4.2; D.6.4, now D.4.4 will be deleted in the final permit. However, their emissions will be discounted from the overall limit of 100 tons per year.

Source's Requests 2:

Eli Lilly, also requests IDEM, OAQ to delete the description of the feed mill in Section A.2(d) and all of Section D.7. The feed mill has not been in operation since late 1999, and Lilly does not intend to operate the feed mill in the future. Lilly has begun removing equipment.

OAQ Response 2:

Section A.2(d) and all of Section D.7, regarding the feed mill were deleted from the FESOP. The facility listed after this feed mill in Section A.2 was re-numbered from (e) to (d). See below changes.

(c) ~~a feed mill~~

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
4	<p>feed mill: corn cob unloading and milling, grain processing, cleared compound processing, uncleared compound processing and general cleaning (control house vacuum dust collector):</p> <p>The corn cob processing has the following operations: unloading, milling – whole cob, and milling – regrind.</p> <p>The grain processing has the following operations: unloading, bin loading, and milling.</p> <p>The cleared compound processing has the following operations: mixer, pellet mill cooler, bulk loading and bagging.</p> <p>The uncleared compound processing has the following operations: mixer, pellet mill cooler, and bagging.</p> <p>The general cleaning operation is attached to a control house vacuum dust collector (VS-80)</p>	<p>six dust collectors: GD, GU, VS-3, VS-4, VS-21, and VS-80</p>	<p>six stacks: GD, GU, VS-3, VS-4, VS-21, and VS-80</p>

~~(c d) a pilot plant utilized for research and development of formulations for plant and animal herbicide and pesticide products. The plant occasionally produces small quantities of material for commercial sale. This pilot plant is operated by Dow Elanco.~~

The following Reporting Forms are revised to incorporate the changes, and the reporting time was changed from semi-annual into quarterly reporting time. The reporting time in the original FESOP was inadvertently required at semi-annual. FESOP's intention was always that the reporting time should be quarterly whenever the source has material usages and emissions limits in the permit, and semi-annual whenever there are no limits.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
FESOP No.: F059-5580-00001
Facility: five (5) natural gas/no.2 fuel oil fired boilers (ID#s 254-1, 254-2, 254-3, 254-4, and 262-1) with heat input capacities of 51.0, 63.0, 67.0, 78.0, and 3.2 million Btu per hour, respectively.

insignificant activities:

- (a) one (1) natural gas/no. 2 fuel oil-fired boiler (ID# 262-2) with a heat input capacity less than or equal to 1.95 million Btu per hour;
- (b) three (3) natural gas-fired boilers (ID#s 293-1, 229-1 and 229-2), with a heat input capacities less than or equal to 2.1 million Btu per hour;
- (c) ~~one (1) no. 2 fuel oil-fired boiler (ID# 418), with a heat input capacity of 0.72 million Btu per hour.~~

Parameter: average sulfur content of no.2 fuel oil, average higher heating value of fuel oil, natural gas and #2 distillate fuel oil usage

Limit: ~~1,038~~ **738** million cubic feet of natural gas per year rolled on a monthly basis and 0.35% sulfur content of no. 2 fuel oil; ~~3,556~~ **3,332.0** kgals of fuel oil per 12 consecutive months rolled on a monthly basis.

Year: _____

Month	Average sulfur content of fuel oil (%)	Average higher heating value of fuel oil (Btu/gal)	Fuel usage per month A. (cubic feet of natural gas) B. (gallons of fuel oil)	Fuel usage for the previous 12 months C. (A+ 143 200 *B) cubic feet
Month 1 (Month)			A. B.	C.
Month 2 (Month)			A. B.	C.
Month 3 (Month)			A. B.	C.

Note: ~~443~~ **200** cubic feet of natural gas is equivalent to 1 gallon of #2 distillate fuel oil.

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Eli Lilly and Company, Greenfield Laboratories
Source Address: 2001 West Main Street, Greenfield, Indiana 46140
FESOP No.: F059-5580-60001
Facility: (a) one (1) natural gas, multi chamber, Brule incinerator (ID# 253-1) with a heat input capacity of 3.9 million Btu per hour and
(b) one (1) natural gas, multi chamber, Consumat incinerator (ID# 241-1) with a heat input capacity of 2.8 million Btu per hour.
Parameter: total waste throughput and hydrochloric acid (HCl) emissions
Limit: **Less than 547 591** tons of waste per consecutive month period rolled on a monthly basis and
9-2 Less than 10 tons of HCl per consecutive month period rolled on a monthly basis

Year: _____ Quarter _____

Month	waste throughput per month (tons)	waste throughput for the previous 12 months (tons)	HCl emissions per month (tons)	HCl emissions for the previous 12 months (tons)
Month 1				
Month 2				
Month 3				

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

- (d) Condition B.24 - Inspection and Entry (re-numbered to B.21), is revised as follows:

B.2421 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of ~~IDEM~~ **proper** identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

* * *

- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of ~~demonstrating~~ **assuring** compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of ~~demonstrating~~ **assuring** compliance with this permit or applicable requirements. [326 IAC 2-8-5(a)(4)]
- (e) Condition C.8 - Operation of Equipment, items (a) and (c), which require that "all equipment that potentially might emit pollutants into the ambient air certain equipment shall be properly operated" and "keep all air pollution control equipment in proper operating condition" are deleted.
- (f) Condition C.8 - Operation of Equipment, item (b), is deleted because it puts unnecessary requirements upon facilities that have no applicable requirements and control equipment that are operated voluntarily.
- (g) Condition B.13 - Preventive Maintenance Plan language in the FESOP was used and items (a)(3) and (a)(4) are no longer part of the new Preventive Maintenance Plan language.
- (h) Condition B.13 - Preventive Maintenance Plan, item (a), is revised as follows to include language which allows preparation and implementation of Preventive Maintenance Plans within 90 days after issuance of the permit:

B.13. Preventive Maintenance Plan

- (a) **If required by specific condition(s) in Section D of this permit, The the Permittee shall prepare, maintain and implement operation and Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit and such plans as necessary including shall include** the following information on each **facility**:
- * * *
- (i) Condition C.18 - General Record Keeping Requirements (re-numbered as C.13), this condition was changed using the language in the most recent FESOP model.
- (j) Condition C.17 - Monitoring Data Availability was removed since it is no longer in the FESOP Model language.
- (k) Conditions C.13 - Maintenance of Monitoring Equipment, C.15 - Pressure Gauge

Specifications, and C.16 - Failure To Take Corrective Actions are deleted since there is no parametric monitoring required for any facilities listed in the permit.

(I) Several Minor Revisions to be reflected in this permit as follows:

- (1) Section D.5 is added in the permit to address the two (2) cold solvent cleaners and any other future cold cleaning facility that is considered "insignificant." These insignificant activities have applicable requirements.
- (2) The Building 409 pharmaceutical production facility has been added in Section 5 under insignificant activities. Particulate matter emissions from small units with process weight rate below 100 pounds per hour are regulated by 326 IAC 6-3, and are limited to 0.551 pound per hour.
- (3) In reference to condition C.6 - Asbestos Abatement Projects (re-numbered as C.7), 40 CFR part 61, Subpart M is added as a rule cite. This condition has a new language in the most recent FESOP Model, and was used in this permit. See page 33 of 54 of this TSD for additional responses on this topic.
- (4) In reference to condition C.7 - Stratospheric Ozone Depleting Substance Regulations (re-numbered as C.17) has a new language in the FESOP Model and was used in this permit. The words "as applicable" were inserted before the colon on the 1st paragraph to reflect the fact that some of 40 CFR part 82 may not apply to the source.
- (5) Condition D.1.11 Record Keeping has been changed using the new language in the FESOP Model.
- (6) The last sentence of condition D.5.7 (re-numbered as D.3.7) and the opening clause of section A.2, item (c), is revised to read "back-up generator" instead of "emergency generator." The opening clause of section A.2, item (c), is also changed to read "no.2 fuel oil fired" instead of "natural gas fired." These changes reflect the proper description of the subject facility.
- (7) Condition B.14 - Emergency Provision is revised as follows in order to be consistent with the most latest rule language:

B.14 Emergency Provision

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided ~~as follows:~~ in **326 IAC 2-8-12**.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

* * *

- (4) For each emergency lasting ~~longer than one hour or~~ **more**, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency ~~occurrence by telephone or facsimile; or~~ **after the emergency was discovered or reasonable should have been discovered:**

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality) or,

Telephone No.: 317-233-5674 **(ask for Compliance Data Section)**

Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting ~~longer than one (1) hour or~~ **more**, the Permittee submitted written ~~notice either in writing or by facsimile of the emergency to:~~ **the attached Emergency Occurrence Report Form or its equivalent, either by mail or fascimile to:**

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency. The notice shall fulfill the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification of an ~~“responsible official”~~ **authorized individual** as defined by 326 IAC ~~2-7-1(C)(33)~~ **2-1.1-1(1)**.

* * *

* * *

- (d) This emergency provision supersedes ~~any emergency or upset provision contained in~~ 326 IAC 1-6 (Malfunctions) **for sources subject to this rule after its effective date.** This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

* * *

- (f) Failure to notify IDEM, OAQ, by telephone or facsimile ~~within four (4) daytime business hours after the beginning of the emergency~~ **of an emergency lasting more than one (1) hour in compliance with (b)(4) and (b)(5)** shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

- (8) The limit on higher heating value in condition D.1.5 is deleted since it is not necessary because the heating value on fuel oil no.2 is standard.
- (9) See item (8) response.
- (10) The following statement has been deleted in Condition D.4.1, now D.6.1 since it is redundant to the next sentence in the condition "This shall limit the source-wide SO₂ and NO_x emissions to 99 tons per 365 consecutive day period".
- (11) Applicable SO₂ and NO_x emission limitations for the fuel oil-fired emergency generators, fuel oil-fired back-up generator, and fuel oil-fired emergency fire pump engines are revised to reflect the values as calculated under Appendix A of the original Technical Support Document.
- (12) The word "and" at the end of condition B.12 - Annual Compliance Certification, item (c)(4) will stay, since there is another section after C(4).
- (13) Conditions C.5, and C.10, which implement the National Emission Standard for Radionuclide Emissions from Facilities Licensed by the Nuclear Regulatory Commission, 40 CFR Part 61, Subpart I, is deleted from the permit. The rule was rescinded on December 30, 1996.

The following are additional changes to the FESOP as requested by Lilly:

- (a) Lilly has requested on April 14, 1998 that IDEM make a determination that a portion of the Greenfield Laboratories, specifically the pilot plant, owned and operated by Dow AgroSciences is now a separate and distinct "source" as defined by Indiana air pollution control regulations, and that IDEM remove any references and requirements applicable to that portion from the FESOP.

Based on information provided by Lilly on its April 14, 1998 letter and additional information provided on February 12, 1999, IDEM agrees that the pilot plant operated by

Dow AgroSciences is a separate source. Therefore, all references to the pilot plant are removed from the FESOP.

The following are additional changes to the FESOP made by IDEM to reflect the latest language in the FESOP Model (12/07/01 version) which corrected the deficiencies identified by EPA and agreements from the CASE coalition group:

Section A - Source Summary

- (a) The following introductory paragraph is added:

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

- (b) Since the new 326 IAC 2 rules (promulgated on December 25, 1998) allow FESOP certifications by an "authorized individual" rather than a "responsible official", the following change is made to section A.1 - General Information:

~~Responsible Official: August M. Watanabe~~

**Authorized Individual: David O'Donnell, Manager Plant Engineering,
Maintenance and Utilities**

or

**Paul Gilson, Team Leader, Environmental Control
and Services**

- (c) The rule cite in the first sentence of section A.3 - Insignificant Activities is changed from 326 IAC 2-7-1(20) to 326 IAC 2-7-1(21).

- (d) Section A.5 - Prior Permit Conditions Superseded is revised as follows:

A.5 Prior Permit Conditions Superseded ~~[326 IAC 2-1-2][326 IAC 2-1-3][326 IAC 2-1-4]~~

~~This permit supersedes the conditions of all construction and operating permits issued under 326 IAC 2-1-2, 2-1-3, and 2-1-4 prior to the date of publication of the draft FESOP on October 24, 1996.~~

- (a) **All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either**

- (1) **incorporated as originally stated,**

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

Section B - General Conditions

(e) Condition B.1 - General Requirements is deleted and replaced with new condition B.1 - Permit No Defense as follows:

~~B.1 — General Requirements [IC 13-15] [IC 13-17] (Prior to July 1, 1996: IC 13-7 and IC 13-1-1)~~

~~The permittee shall comply with the provisions of IC 13-15 (Permits Generally), IC 13-17 (Air Pollution Control) and the rules promulgated thereunder.~~

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

(f) Condition B.2 - Definitions is revised as follows:

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the ~~meaning~~ **definition** assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11 ~~(prior to July 1, 1996, IC 13-7-2, IC 13-1-1-2)~~, 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

(g) Condition B.3 - Permit Term is revised as follows:

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-5-5-3 ~~(prior to July 1, 1996, IC 13-7-10-2.5)~~, of the permit. **Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.**

(h) Condition B.5 - Termination of Right to Operate is revised as follows:

B.5 Termination of Right to Operate [326 IAC 2-8-9] **[326 IAC 2-8-3(h)]**

~~The expiration of this permit terminates the Permittee's right to operate unless a timely and complete Model application has been submitted consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-7.~~

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete Model application is submitted

at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

(i) Condition B.6 - Severability is revised as follows"

B.6 Severability [326 IAC 2-8-4(4)]

~~(a) — The provisions of this permit are severable;; and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby~~ **a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.**

~~(b) — Indiana rules from 326 IAC quoted in conditions in this permit are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.~~

(j) Condition B.8 - Duty to Supplement and Provide Information, item (c), is revised as follows:

(c) Upon written request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. ~~For information claimed to be confidential, the Permittee shall furnish such records directly to both the U.S. EPA and IDEM, OAQ, along with a claim of confidentiality.~~ **If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.**

~~Such confidentiality claims shall meet the requirements of 40 CFR Part 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM, OAQ).~~

(k) Condition B.11 - Certification is revised as follows:

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] **[326 IAC 2-8-5(1)]**
~~Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~

~~A responsible official is defined at 326 IAC 2-7-1(33).~~

- (a) **Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.**
- (b) **One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.**
- (c) **An authorized individual is defined at 326 IAC 2-1.1-1(1).**

(I) Condition B.12 - Annual Compliance Certification is revised as follows:

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) ~~The Permittee shall annually certify that the source has complied~~
annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, and work practices. All certification shall **cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:**

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) ~~This~~ **The** annual compliance certification report required by this permit shall be **considered** timely if **the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.**

~~(1) — Delivered by U.S. mail and postmarked on or before the date it is due; or~~

~~(2) — Delivered by any other method if it is received and stamped by IDEM, OAQ, on or before the date it is due.~~

- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term and condition of this permit that is the basis of the certification;

- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent; and
- (4) The methods used for determining the compliance status of the source, currently and over the reporting period **consistent with 326 IAC 2-8-4(3); and**
- (5) **Such other facts as specified in Sections D of this permit, that IDEM, OAQ, may require to determine the compliance status of the source.**

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (m) In addition to agreed changes made above to condition B.13 - Preventive Maintenance Plan, the following changes are also made:

B.13 Preventive Maintenance Plan [326 IAC 2-8-5(a)(1)] [326 IAC 2-8-4(9)] [326 IAC 1-6-3]

- (a) **If required by specific condition(s) in Section D of this permit, The** the Permittee shall maintain and implement Preventive Maintenance Plans (**PMPs**) within **ninety (90) days** after issuance of this permit, including the following information on each **emission unit**:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts which will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee’s control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

**Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015**

The PMP and the PMP extension notification do not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (b) **The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement a PMP does not cause**

or contribute to a violation of any limitation on emissions or potential to emit.

(b)(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(n) Condition B.15 - Deviations from Permit Requirements and/or Conditions is revised as follows:

B.15 Deviations from Permit Requirements and/or Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from **any permit** requirements (for emergencies see Condition B.14 - Emergency Provision), the probable cause of such deviations, and any ~~corrective actions~~ **response steps** or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

(o) Condition B.16 - Permit Modification, Reopening, Revocation and Reissuance, or Termination, item (b) is revised as follows:

(a) This permit may be modified, reopened, revoked and reissued, or terminated for

cause. The filing of a request by the Permittee for a **FESOP** modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] **The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 (prior to July 1, 1996, in IC 13-7-10-5) or if the ~~commissioner~~ **IDEM, OAQ**, determines any of the following:

* * *

- (p) Condition B.17 , was revised as follows:

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21 ~~θ~~) **and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

- (1) ~~The Permittee has a duty to submit a timely and complete permit renewal application.~~ A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) ~~Delivered by U.S. mail and postmarked on or before the date it is due; or~~ **If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due. [326 IAC 2-8-3]**

- ~~(C) Delivered by any other method if it is received and stamped by IDEM, OAQ, on or before the date it is due.~~

- (2) If IDEM, OAQ **upon receiving a timely and complete permit**

application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

- (c) **Right to Operate After Application for Renewal [326 IAC 2-8-9]**
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as needed to process the application.
- (q) Conditions B.18 - Administrative Permit Amendment, B.19 - Minor Permit Modification, and B.20 - Significant Permit Modification are deleted and replaced with the following new condition B.18 - Permit Amendment or Revision:
 - B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]**
 - (a) **Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or revise this permit.**
 - (b) **Any application requesting an amendment or modification of this permit shall be submitted to:**

**Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015**

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
 - (c) **The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]**
- (r) Condition B.21 - Permit Revision Under Economic Incentives and Other Programs is deleted.
- (s) Condition B.22 - Operational Flexibility (re-numbered to B.19) is revised as follows:
 - B.2219 Operational Flexibility [326 IAC 2-8-15]**
 - (a) The Permittee may make any change or changes at ~~the this~~ source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;

- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch
(AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(1), (c)(1), and (d).

~~The notification which shall be submitted by the Permittee does not require the certification of a "responsible official" as defined by 326 IAC 2-7-1(C)(33).~~

- ~~(b) For each such change, the required written notification shall include the following:~~

- ~~(1) A brief description of the change within the source;~~
- ~~(2) The date on which the change will occur;~~
- ~~(3) Any change in emissions; and~~
- ~~(4) Any permit term or condition that is no longer applicable as a result of the change.~~

(b) **The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraints of 326 IAC 2-8-15(a) and the following additional conditions:**

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) **Emission Trades [326 IAC 2-8-15(c)]**
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(d) **Alternative Operating Scenarios [326 IAC 2-8-15(d)]**
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7) ~~and subject to the constraints in section (a) of this condition and those in 326 IAC 2-8-15(d).~~ **No prior notification of IDEM, OAQ or U.S. EPA is required.**

(e) Back-up fuel switches specifically addressed in, and limited under, section D of this permit shall not be considered ~~A~~alternative ~~O~~operating ~~S~~scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

(t) Condition B.23 - Construction Permit Requirement (re-numbered to B.20) has been changed to **Permit Revision Requirement [326 IAC 2-8-11.1]** is revised as follows:

~~B.2320 Construction Permit Requirement [326 IAC 2-4]~~ **Permit Revision Requirement [326 IAC 2-8-11.1]**

~~Modification, construction, or reconstruction shall be permitted as required by and in accordance with 326 IAC 2-~~

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

(u) A new condition B.22 - Transfer of Ownership or Operation is added as follows:

B.22 Transfer of Ownership or Operation [326 IAC 2-8-10]

(a) **The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or**

operational control of the source and no other change in the permit is necessary.

- (b) **Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:**

**Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015**

The application which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) **The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]**

- (v) Condition B.25 - Annual Fee Payment (re-numbered to B.23) is revised as follows:

B.2523 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) **The Permittee shall pay annual fees to IDEM, OAQ, consistent with the fee schedule established in 326 IAC 2-8-16 within thirty (30) calendar days of receipt of a bill. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.**
- (b) **Failure to pay may result in administrative enforcement action, or revocation of this permit, referral to the Office of Attorney General for collection, or other appropriate measures.**
- (c) ~~The Permittee shall pay the annual fee within thirty (30) calendar days of receipt of a billing by IDEM, OAQ or in a time period that is consistent with the payment schedule issued by IDEM, OAQ.~~
- (d)(c) **If the Permittee does not receive a bill from IDEM, OAQ, thirty (30) calendar days before due date, the The Permittee shall may call the following telephone numbers: 1-800-451-6027 or 317-233-0479 0425 (ask for OAQ, Data Technical Support and Modeling Section), to determine the appropriate permit fee. The applicable fee is due April 1 of each year.**

- (w) Condition B.26 - Construction Permit or Enhanced New Source Review in the original FESOP has been deleted in the FESOP Model language, since it is no longer in the permitting rule.

Section C - Source Operation Conditions

(x) Condition C.1 - Overall Source Limit is revised as follows:

C.1 **Overall Source Limit** [326 IAC 2-8]

~~Pursuant to 326 IAC 2-8, emissions of any regulated pollutant from the entire source shall not exceed 99 tons per 365 day period. Emissions of hazardous air pollutants (HAPs) from the entire source shall not exceed 9 tons per 365 day period for any individual HAP or 24 tons per 365 day period of any combination of HAPs. Emissions shall include those from all emission points at the source including those that are insignificant as defined in 326 IAC 2-7-1(20). The source shall be allowed to add insignificant activities not already listed in this permit, as long as the total emissions from the source do not exceed the above specified limits. In the event that any condition or combination of conditions in Section D of this permit differs from the above, the most restrictive limit will prevail.~~

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) **The potential to emit any regulated pollutant, from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)) not applicable;**
- (2) **The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and**
- (3) **The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.**

(y) Condition C.2 - Opacity is revised as follows:

C.2 **Opacity** [326 IAC 5-1]

~~Pursuant to 326 IAC 5-1-2 (Visible Emissions Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions opacity shall meet the following, unless otherwise stated in Section D of this permit:~~

- (a) **~~Visible emissions Opacity~~ shall not exceed an average of **forty percent (40%) opacity** in 24 consecutive readings in any one (1) **six (6) minute averaging period as determined in 326 IAC 5-1-4.****
- (b) **~~Visible emissions Opacity~~ shall not exceed **sixty percent (60%) opacity** for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period **fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one****

(1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

IDEM has also incorporated changes due to the new updates as of 12/7/01

According to 326 IAC 2-8-6(b), all terms and conditions in a FESOP, including any provisions designed to limit a source's potential to emit, are enforceable by the U.S. EPA; therefore, the following statements with a strike out have been removed from the FESOP model.

(a) Condition C.3 - Open Burning is revised as follows:

C.3 Open Burning **[326 IAC 4-1] [IC 13-17-9]**
The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. **The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.**

(b) The last statement in Condition C.4 has been deleted as follows:

C.4 Incineration **[326 IAC 4-2] [326 IAC 9-1-2(3)]**
The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. ~~326 IAC 9-1-2 is not federally enforceable.~~

(c) Condition C.4, now C.5 - Fugitive Dust Emissions is revised as follows:

C.5 Fugitive Dust Emissions **[326 IAC 6-4]**
~~The Permittee shall be in violation of 326 IAC 6-4 if any of the criteria specified in 326 IAC 6-4-2 (1) through (4) are violated.~~ **The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.**

(d) The last statement in Condition D.1.3 has been deleted as follows:

D.1.3 Sulfur Dioxide (SO₂) Emissions From Boilers 254-1, 254-2, and 254-3
Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the combustion of #2 distillate fuel oil for boilers 254-1, 254-2, and 254-3 shall each be limited to 0.5 pounds per million BTU heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. ~~326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.~~

The following are additional comments made by Lilly on its letter dated November 13, 2001:

(a) Comments: Condition C.6 Asbestos Abatement Projects: Lilly questioned why parts of the asbestos rules were singled out and quoted in the permit. Specifically, Lilly requested that C.6(a) be deleted.

- Response: C.6 Asbestos Abatement Projects - The language in the permit is the same as the Federal language found in 40 CFR 61, Subpart M. This portion was singled out to emphasize when renovation must and must not be reported. If the Permittee's renovation will involve stripping, removing or disturbing two hundred sixty (260) linear feet on pipes, one hundred sixty (160) square feet on other facility components; or a total of thirty-five feet (35) cubic feet on all facility components or more of friable asbestos, then the Permittee must notify IDEM using an IDEM notification form at least ten (10) working prior to renovation. No change to this condition will be made.
- (b) Comment: Condition C.6(f) - With respect to the requirement to use an accredited asbestos inspector the word "not" should be added before "federally enforceable".
- Response: Condition C.6(f) - 40 CFR 61, Subpart M - This requirement is federally enforceable, since 326 IAC 2-8-6(b) states that all terms and conditions in a FESOP are enforceable by the U.S. EPA. Condition C.6(f) will remain the same.
- (c) Comment: Condition C.16 language should be changed to reference 40 CFR 82, rather than quoting only portions of the rule.
- Response: The whole 40 CFR Part 82 is applicable, however the condition merely emphasizes part of this rule. No changes will be made to this condition.
- (d) Comment: Condition D.1.6 - Lilly disagrees with the equivalent pounds per hour for the boilers particulate emission limit of pound per million British thermal units (lb/mmBtu). Lilly explained that the equivalent pounds per hour limitation is calculated from descriptive information which is not federally enforceable. The source has elected to take federally enforceable condition restricting hours of operation or fuel consumption. This calculated information might be better located in the TSD.
- Response: The pound per hour equivalent limit was deleted in the permit.
- (e) Comment: Condition D.1.7 and D.2.5 - Lilly continues to believe that preventive maintenance plans are not required for the boilers covered by Section D.1 or the incinerators covered by Section D.2. IDEM's rationale is that the PMPs are necessary because the site has taken a fuel usage limit to become synthetic minor. Thus, under the agency's rationale the same boiler- one located at a FESOP site and one located at a Title V site- would be treated differently. That is, a PMP would be required under the FESOP, but not a Title V permit. The units covered by Sections D.1. and D.1.2 do not warrant a PMP under the criteria set forth in IDEM's guidance document for compliance monitoring and, therefore do not justify the requirements for PMPs.
- Response: Lilly meets one of the criteria in the Compliance Monitoring Guidance (where SO₂ was limited to avoid an applicable requirements) and

therefore, PMP and Compliance Monitoring is required in Section D.1 and Compliance Monitoring on Section D.2.

In Section D.1, whenever fuel oil is improperly combusted by the boilers, visible emissions will be generated. Therefore, Visible Emission Notation will be required for boilers IDs 254-1, 254-2, 254-3, and 254-4, as a surrogate for the opacity requirements. Thus, this requirement is a demonstration of compliance with 326 IAC 5-1, and 326 IAC 6-2 : The following conditions were added in Section D.1:

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boilers IDs 254-1, 254-2, 254-3 and 254-4.

D.1.10 Visible Emissions Notations

- (a) **Visible emission notations of the boilers IDs 254-1, 254-2, 254-3 and 254-4 stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.**
- (b) **For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.**
- (c) **In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.**
- (d) **A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.**
- (e) **The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**

In Section D.2, the following conditions were added as a surrogate for the opacity requirements under 326 IAC 5-1.

D.2.8 Visible Emissions Notations

-
- (a) **Visible emission notations of the Brule incinerator (ID# 253-1) and Consumat incinerator (ID# 241-1) stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.**
 - (b) **For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.**
 - (c) **In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.**
 - (d) **A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.**
 - (e) **The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**
- (f) Comment: Condition D.1.10 - IDEM's justification for the requirement for Visible Emission Notations is based on the same reasoning as for the PMPs. Visible emission Notations were not included in the original FESOP, and Lilly believes they are inappropriate for the boilers identified in D.1.10(a).
- Response: Please see above response (e).
- (g) Comment: Conditions D.1.11, D.2.7, D.3.3, D.4.3 and D.6.4 (Record Keeping) - Lilly requests that the language " at the stationary source" be deleted from these conditions because it conflicts with Condition C.13 which allows records to be retained off-site for the last 2 years of the record retention period.
- Response: The language " at the stationary source" has been deleted in Conditions

D.1.11, now D.1.9; D.2.7; D.3.3; D.4.3 and D.6.4 (Record Keeping). See one of the affected conditions below:

D.1.11 Record Keeping Requirements

(a) The Permittee shall maintain monthly records ~~at the stationary source~~ of the following values:

(h) Comment: Condition D.6.3 (PM emissions limit for freeze drying operation in Building 409)- As part of its petition for administrative review, Lilly asserted that the process weight rule should not apply to this operation, but asked for IDEM to clarify it through a non-applicability statement. Because the PM emissions from the freeze drying operation are de minimis, Lilly does not believe the process weight rule is applicable. Lilly is also aware that the process weight rule is subject to ongoing rulemaking that will clearly exempt certain insignificant activities when finalized.

Response: IDEM agrees that there was some previous determination made that process weight rate below 100 pounds per hour are not regulated by 326 IAC 6-3. However, this determination was retracted in one of the permits issued (AA129-11329), and has since been applying 326 IAC 6-3 for process weight rates below 100 pounds per hour. Therefore, the PM emission limit determined for the pharmaceutical operation in Building G409 will remain unchanged.

The following are additional comments from Lilly dated January 16, 2002 on the draft FESOP. IDEM has also incorporated changes due to the new updates as of January 2002:

(a) Comment: On Section D.1, please change "5 insignificant natural gas/no.2 fuel oil fired boilers" to "four (4) insignificant natural gas/no. 2 fuel oil fired boilers".

Response: The permit was changed to reflect the correct number of boilers.

(b) Comment: On Section D.5, please change "Insignificant activities - three (3) degreasers" to "Insignificant activities - four (4) degreasers".

Response: Section D.5 has been changed to reflect your comment.

(c) Comment: Section D.6 is not warranted, please see Section D.6 comments below.

Response: This Section has been deleted in the permit.

(d) Comment: Section A Source Summary - should reference Section A.1 through A.5, instead of only Section A.1 through A.3.

Response: Section A has been revised and will reference Section A.1 through A.5.

(e) Comment: Delete in Section A.3(c) "(Note: These insignificant activities have applicable requirements in Section D.6)". See Section D.6 comment below.

Response: Section D.6 for the emergency generators has been deleted.

(f) Comment: Section A.3(j)(2): Please change "One (1) Building.." to read "Two (2) Building.."

Response: Section A.3(j)(2) has been changed to reflect your comment.

(g) Comment: Condition A.5: Lilly requests the opportunity to review the new condition A.5 language prior to public noticing the Greenfield FESOP. The new condition A.5 is warranted due to the recent adoption of 326 IAC 2-1.1-9.5 (General Provisions, term of permit) rule.

Response: Section A.5 Prior Permit Conditions have been changed to the following:

A.5	Prior Permit Conditions	Prior Permits Superseded [326 IAC 2-1.1-9.5]
	(a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.	
	(a)	All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
		(1) incorporated as originally stated,
		(2) revised, or
		(3) deleted
		by this permit.
	(b)	All previous registrations and permits are superseded by this permit.
	(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.	

(h) Comment: Condition B.1 - Insert "or revised." after ".. The permit was issued."

Response: Condition B.1 has been revised to reflect the comment as follows:

B.1	Permit No Defense [IC 13]
	Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued or revised . The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.
(i)	Comment: Condition B.12(c)(5) - Lilly requests deletion of this condition. When read in conjunction with " shall include" in the first line of subsection (c), this condition could be broadly interpreted to require Greenfield to submit all data with its compliance certification. IDEM has sufficient language in other parts of the permit, including Condition B.21

Inspection and Entry, to preserve its authority to collect additional data.

Response: Subsections (c)(1) through (5) cover the general information that will always be needed in the Annual Compliance Certification. Section D may indicate that additional information is to be included. Subsection (5) reminds the Permittee to review the requirements in the entire permit to prevent an incomplete Annual Compliance Certification. The condition will not be changed as a result of this comment.

(j) Comment: Condition B.19(b) - Lilly suggests the following modified language. Insert "For such change described in subsection (a) the required written notification shall include the following." Please delete "The Permittee may make Section 502(b)(10)..." language.

Response: Condition B.19(b) which reference Section 502(b)(10) will be changed to the following language since Section 2-8-15 already covers the items listed in Section 502(b)(10). The change is as follows:

(b) ~~The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions~~ **For each such change described in subsection (a), the required written notification shall include the following:**

(k) Comment: Condition B.14(b)(4) - Please delete "Failure to notify IDEM.." language. This condition is duplicative of B.14(f).

Response: Condition B.14(b)(4) has been deleted, since it was already mentioned in Section(f) of this condition.

(l) Comment: Condition B.21 - Please see the following suggested language (bolded):

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
 - (1) **The Permittee may assert a claim that, in its opinion, information removed or about to be removed from the source by IDEM, OAQ or its authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing [IC-5-14-3-4; IC 13-14-11-3; 326 IAC 17.1]**
 - (2) **The Permittee and IDEM, OAQ acknowledge that federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA [40 CFR Part 2, Subpart B]**

Response: Instead of adding the language suggested, IDEM OAQ has added the following language after Section (e) of Condition B.21 of the permit:

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]
(a) through (e) No changes

- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
 - (1) **The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, nor an authorized representative, may disclose the information unless and until IDEM, OAQ, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]**
 - (2) **The Permittee, and IDEM, OAQ acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]**

- (m) Comment: Condition B.24 - This condition is no longer warranted, Lilly does not anticipate commencing construction of emission units which require advanced approval within the next eighteen (18) months

Response: Condition B. 24 Advanced Source Modification Approval has been deleted in the permit.

- (n) Comment: Condition C.1(b) - Please delete this condition. It is duplicative of the second sentence in (a)(1)

Response: This condition will be deleted as follows:

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, ~~including particulate matter (PM)~~, from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

~~(b) The potential to emit particulate matter (PM) from the entire source is less than one-hundred (100) tons per year. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) is not applicable.~~

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

- (o) Comment: Condition C.4 - Insert "and Section D.2 of this permit." after "326 IAC 9-1-2." Section D.2 provides descriptive information on types of waste feed to either the 253-1 or 241-1 incinerators.

Response: The language " and Section D.2 of this permit." was added in Condition C.4. Several conditions were also modified including Condition C.4 by removing language stating that the condition was not federally enforceable. Federal law states that failure to comply with any permit condition issued under a program that has been approved into a State Implementation Plan (SIP) is to be treated as a violation of the SIP (40 CFR 52.23). This has the effect of making all FESOP conditions federally enforceable. Indiana's FESOP program was approved as a part of Indiana's SIP at 40 CFR 52.788. Neither the program nor the underlying rule, 326 IAC 2-8 contains provisions for designating certain conditions as not federally enforceable. Revision to Condition C.4 is as follows:

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2, ~~and in 326 IAC 9-1-2, and Section D.2 of this permit.~~ 326

~~IAC 9-1-2 is not federally enforceable.~~

- (p) Comment: Condition C.12(b)(2) - Insert "or a violation of", after "Taking such additional response steps shall not be considered a deviation from." This reflects the final language agreed upon between IDEM and the CASE Coalition.

Response: Although C.12 was the final CASE language, inserting "or a violation of" will not change the intent of this condition. Therefore, condition C.12(b)(2) will be changed as follows:

C.12 Compliance Response Plan - Preparation, Implementation, Records and Reports
[326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) no changes
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from, **or a violation of**, this permit so long as the Permittee documents such response steps in accordance with this condition.
- (q) Comment: Condition C.12(e) - Insert "pursuant to Section D" after "The Permittee shall record instances when response steps are taken." This reflects the final language agreed upon between IDEM and the CASE Coalition.
- Response: Condition C.12(e) has been revised to reflect your request.
- (r) Comment: Condition C.13 - Delete "upon request" insert "within 30 days after written request" after "The records may be stored elsewhere for the remaining two (2) years as long as they are available".
- Response: The availability of record "upon request" in Condition C.13 will not be changed, since this language is verbatim from the rule.
- (s) Comment: Conditions D.1.7 and D.2.6 - Please delete Preventive Maintenance Plan requirement. Per the 1996 Compliance Monitoring Guidance (2006 guidance) IDEM developed, only emission units which emit PM, VOC and SO₂ are subject to Compliance Monitoring as outlined in this document. Based on discussion with IDEM, it is understood the same units subject to the 1996 guidance are therefore subject to PMP requirements. Since these emission units emit SO₂ and have conditions limiting their potential to emit (i.e. Lilly as taken a federally enforceable limit to become a synthetic minor source), IDEM is asserting compliance monitoring requirements. PMPs, and VEs are required. Therefore

requesting the development of a PMP for the boilers, because these units would otherwise be subject Title V requirements. From a practical approach, Lilly asserts that SO₂ emissions from a boiler are predominantly affected only by sulfur content of the fuel. Therefore a PMP developed for the emission unit will have little or no effect on preventing SO₂ emission to the ambient air. The permit contains limits on sulfur content in the fuels. Lilly requests the deletion of Condition D.1.7. Also, Lilly requests the deletion of condition D.2.6 since these units are subject to a condition limiting HCl potential to emit. HCl is not a VOC, therefore these units are not required to develop PMP or compliance monitoring requirements

Response: This comment is similar to comment (e) on Page 35 of this TSD. Please see response to this comment on Page 35 thru 37.

(t) Comment: Condition D.1.10 - These units are not subject to the VE requirements, because they are not subject to a condition limiting PM PTE.

Response: Please see response to comment (e) on Page 36 of this TSD, which addresses this issue.

(u) Comment: Conditions D.1.11, D.2.7, D.3.3, D.4.3 and D.6.4 (Record Keeping) - Lilly requests that the language "at the stationary source" be deleted from these conditions because it conflicts with Condition C.13 which allows records to be retained off-site for the last 2 years of the record retention period.

Response: The language "at the stationary source" was deleted in Conditions D.1.11; D.2.7; D.3.3; and D.6.4 (Record Keeping).

(v) Comment: Condition D.11(b) - Delete this condition. Please see condition D.1.7, D.2.6 and D.1.10 comments.

Response: Condition D.11(b), which is record keeping of visible emission notation from the boilers will stay. See response to comment (e) on Page 36.

(w) Comment: Condition D.1.12(b) - Please delete this condition. The regulatory authority for this requirement is not apparent. This condition is duplicative of condition D.1.12.

Response: Section (b) of Condition D.1.12, is not duplicative of Section (a). Section (b) is a separate requirement from Section (a), which is a Natural Gas Fired Boiler Certification. Section(a) requires the submission of other reporting forms required for the boilers. The Natural Gas Fired Boiler Certification is required for all boilers including insignificant activity boilers combusting natural gas. The intent of the Certification Form was a substitute for Visible Emission Monitoring requirements for combusting natural gas.

(x) Comment: Condition D.2.1(d) - Lilly requests language which indicates approval by the commissioner of the waste profile as outlined in this permit. Lilly suggests the following sentence be added to this paragraph. "By this permit, the commissioner approves for incineration the waste as

described in this permit.”

Response: This condition is verbatim from the rule, and it is not necessary to add “By this permit, the commissioner approves for incineration the waste as described in this permit” in the permit since the cover page of the permit states that OAQ “authorizes the source to operate the emission units described in Section A subject to the conditions contained herein the permit”.

(y) Comment: Condition D.2.8(d) - Please add this condition - “The weight on a calendar quarter basis of municipal waste combusted, and the weight of all other fuels and waste combusted in the incinerator.”

Response: The above condition as been added and numbered Condition D.2.8(d). D.2.8(c) will be revised in order to reflect the language in the rule:

(c) The weight on a calendar quarter basis, of hospital waste and medical/infectious waste combusted and the weight of all other fuels and wastes combusted in the incinerators.

(z) Comment: Condition D.5.3 - Please move condition D.5.3 to its own section

Response: The Pharmaceutical production facility (Building 409) was moved to its own Section D.6.

Enforcement Issue

There are no enforcement actions pending against the source.

Recommendation

The staff recommends to the Commissioner that the modification be approved.

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations on Page 1 of 6 through Page 6 of 6.

Unrestricted Potential Emissions

This table reflects the **new** unrestricted potential emissions of the source, which includes the operation changes made by the source, that were not included in the original FESOP excluding the emission limits.

Pollutant	PTE (tons/year)
PM	434.34 36.8
PM-10	77.2 26.4
SO ₂	435.5 435.7
VOC	47.4 23.1
CO	78.9 143.2
NO _x	323.9 356.2

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP	PTE (tons/year)
HCl	53.6
TOTAL HAPs	53.6

- (a) The potential to emit (as defined in the Indiana Rule) of SO₂, NO_x, and CO are greater than 100 tons per year. In addition, the potential to emit (as defined in Indiana Rule) of a single HAP is greater than 10 tons/year. Therefore, the source is subject to the provisions of 326 IAC 2-7-1.
- (b) A source with "potential to emit" high enough to make it a "major source" but whose actual emissions are below the Part 70 emission levels may elect to avoid the Part 70 Operating Permit Program by agreeing to accept a permit with federally enforceable limits that restrict its PTE to below the major source emission levels. The permit containing these restrictions is called a Federally Enforceable State Operating Permit (FESOP).

Revised Limited PTE

The source has accepted the following federally enforceable limitations:

- (a) The total usage of natural gas as a primary fuel for all nine (9) boilers including the insignificant units (i.e., boilers 262-2, 293-1, 229-1, and 229-2) shall be less than 738.0 million cubic feet per 12 consecutive month period rolled on a monthly basis (Note: For every gallon of #2 distillate fuel oil used, 200 cubic feet of natural gas shall be deducted from this limit.)
- (b) The total usage of no.2 fuel oil for all nine (9) boilers including the insignificant units (i.e., boilers 262-2, 293-1, 229-1, and 229-2) shall be limited to 3,332.0 kilogallons per twelve (12) consecutive month period, rolled on a monthly basis. This fuel usage limitation is necessary to limit the potential to emit SO₂ to 82.8 tons per 12 consecutive month period rolled on a monthly basis from the boilers only. In order for the source-wide SO₂ emissions to not exceed the Part 70 emission threshold of 100 tons per year, the sulfur content of the no. 2 fuel shall not exceed 0.35 % sulfur content.
- (c) The total annual waste throughput to the two (2) incinerators (ID#s 253-1 and 241-1) shall be less than 591 tons per 12 consecutive month period rolled on a monthly basis.
- (d) The annual hours of operation of the above back-up generator (ID# B409) shall be limited to 500 per 12 consecutive month period rolled on a monthly basis.
- (e) The operating hours of each fire pump engine (FP-B204 and FP-B208) shall be limited to 500 per 12 consecutive month period rolled on a monthly basis.

The above limitations will restrict the combined SO₂, NO_x, and CO emissions to each less 100 tons per year. These will also restrict the single HAP emissions to less than 10 tons per year.

	Limited PTE (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	Single HAP (HCl)
boilers	< 4.2 3.6	< 6.4 2.8	< 96.5 82.8	< 4.4 2.0	< 67.7 31.0	< 80.6 36.9	-
incinerators	< 1.4	< 0.9	< 0.6	< 0.1	< 0.9	< 1.1	< 9.9 10
200 hrs/yr emergency generators:							
EMG-1	1.5 2	1.5 2	2.52	1.7	3.9 9	9 18.0	-
EMG-2	0.0	0.0	0.0	0.0	0.4	4.3	-
EMG-3	0.0	0.0	0.0	0.0	0.0	0.0	-
EMG-Tox	1.5	1.5	2.5	1.9	4.5	20.7	-
back-up generator	0.4	0.4	0.4 7	0.6	1.3	6.2	-
fire pumps	0.4 2	0.4 2	0.4 2	0.2	0.4	1.8	-
Fuel Storage Tanks	0.0	0.0	0.0	0.1	0.0	0.0	-
feed mill	38.7	42.0	---	---	---	---	---
Total Emissions	< 47.6 8.3	< 20.2 7.0	< 98.2 89	< 6.0 6.6	< 72.2 42.4	< 99.3 89	< 9.9 10
Future Addition Cushion			10.0			10.0	
Total Limited PTE	-	< 100	< 100	6.6	42.4	< 100	< 10.0

County Attainment Status

The source is located in Hancock County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	not determined

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Hancock County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

Note: No federal and state rule applicability were determined in the original FESOP. Therefore, this FESOP Model will include a detail determination.

- (a) New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60)
- (1) 40 CFR 60.40c, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This NSPS applies to each

steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 mmBtu/hr or less but greater than or equal to 10 mmBtu/hr.

Boiler 254-1 with a heat input capacity of 51 mmBtu/hr; boiler 254-2 with a heat input capacity of 63 mmBtu/hr; boiler 254-3 with a heat input capacity of 67 mmBtu/hr; and boiler 254-4 with a heat input capacity of 78 mmBtu/hr are not subject to 40 CFR 60.40c because they were all constructed before the applicability date of June 9, 1989.

- (2) 40 CFR Part 60.110b, Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction or Modification Commenced after July 23, 1984.

The fuel oil storage tank ID #254-F with a capacity of 250,000 gallons is not subject to this NSPS because it has been constructed in April 1973, which predates the applicability date of the NSPS.

- (3) 40 CFR Part 60.50c - Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction, is Commenced After June 20, 1996 or for Which Modification is Commenced After March 16, 1998.

The two (2) natural gas-fired medical waste incinerators, identified as Brule Incinerator ID #153-1 and Consumat Incinerator IF 241-1 are subject to this NSPS. However, the source will limit the waste being combusted to qualify as "co-fired combustors and be exempted from this NSPS as follows:

The weight of the fuel feed stream to the two (2) incinerators shall be comprised of ten percent (10%) or less, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. Compliance with the limit and the record keeping requirement in Section D2.7, the two (2) incinerators qualify as "co-fired combustors" as defined by 40 CFR 60.51c and are exempt from 40 CFR Part 60, Subpart Ce.

- (4) **40 CFR Part 60.2000, Subpart CCCC - Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units for which Construction is Commenced After November 30, 1999 or for which Modification or Reconstruction is Commenced on or After June 1, 2001.**

The two natural gas-fired solid waste incinerators, identified as Brule incinerator ID#253-1 and Consumat incinerator ID#241-1, which were existing prior to November 30, 1999 are exempted from 40 CFR Part 60.2000, Subpart CCCC, because the waste combusted by the incinerators will be limited and recorded as follows:

- (a) (1) **The weight of the waste feed stream to the 253-1 incinerator shall be comprised of ninety percent (90%) or greater, in aggregate, of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste, as defined in 40**

CFR 60.2265, as measured on a calendar quarter basis. As specified in 40 CFR 60.2010(a), due to the above limit and the record keeping requirement in Section D.2.8, the incinerator is exempt from 40 CFR Part 60, Subpart CCCC

- (2) **The weight of the waste-feed stream to the 241-1 incinerator shall be comprised of thirty percent (30%) or greater, in aggregate, of municipal solid waste or refuse-derived fuel, as defined in 40 CFR 60 Subpart Ea, Subpart Eb, Subpart AAAA and Subpart BBBB, and that have the capacity to burn less than 35 tons/day municipal solid waste or refuse-derived fuel, as measured on calendar quarter basis. As specified in 40 CFR 60.2010(a), due to the above limit and the record keeping requirement in Section D.2.8, the incinerator is exempt from 40 CFR Part 60, Subpart CCCC.**

- (b) (1) **The weight on a calendar quarter basis, of hospital waste and medical/infectious waste combusted and the weight of all other fuels and wastes combusted in incinerator 253-1; and**

- (2) **The weight on a calendar quarter basis of municipal waste combusted, and the weight of all other fuels and waste combusted in incinerator 241-1.**

- (b) National Emission Standards for Hazardous Air Pollutants (326 IAC 14, (40 CFR Part 63)

- (1) 40 CFR Part 63.460, Subpart T - National Emission Standard for Halogenated Solvent Cleaning. This NESHAP is not applicable to the one (1) machine shop cold solvent cleaner constructed in 1982; two (2) Building G409 cold solvent cleaners constructed after 1990; and one (1) Building 254 cold solvent cleaner constructed after 1990, because they do not use halogenated solvent in cleaning.

State Rule Applicability

- (a) 326 IAC 5-1 (Visible Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(b) 326 IAC 6-2 (PM Emissions from Indirect Heating Facilities):

- (1) Pursuant to 326 IAC 6-2-2(b), the particulate matter emissions from the existing boilers; identified as 254-1 and 254-2, located in Hancock County which were existing and in operation on or before June 8, 1972 shall each not exceed 0.39 pound per million Btu (lb/mmBtu).
- (2) Pursuant to 326 IAC 6-2-2(c), the particulate matter emissions from boiler 254-3 located in Hancock County, which began operation after June 8, 1972 and prior to September 21, 1983 shall not exceed 0.35 lb/mmBtu.
- (3) Pursuant to 326 IAC 6-2-4, the particulate matter emissions from the existing boilers; identified as 262-1, 262-2, and 293-1, which were constructed after September 21, 1983 shall each not exceed 0.25 lb/mmBtu.
- (4) Pursuant to Construction Permit No.: 30-07-93-0074, the particulate matter emissions from boiler 254-4 shall not exceed 0.015 lb/mmBtu.

When using fuel oil no. 2:

$$2 \text{ lb/kgal} * 1 \text{ gal}/0.140 \text{ mmBtu} = 0.014 \text{ lb/mmBtu, all boilers are in compliance with the PM limits when combusting fuel oil no.2}$$

When using natural gas as fuel:

$$1.9 \text{ lb/MMCF} * 1 \text{ MMCF}/1000 \text{ mmBtu} = 0.0019 \text{ lb/mmBtu, all boilers are in compliance with the PM limits when combusting natural gas.}$$

- (c) 326 IAC 6-3-2 (Particulate Emission Limitations for Process Operations), Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Process Operations), the particulate matter (PM) emissions from the following operations and the shall not exceed the following limitations:

Pilot Plant Operation	PM Emissions Limit (pounds/hour)
DC-1 or DC-2	0.9
DC-3	6.5
DC-4	3.4
Building 409 Pharmaceutical Production Operation	0.551

- (d) 326 IAC 8-3-2 (Cold Cleaner Operations)

The one (1) machine shop cold solvent cleaner constructed in 1982; two (2) Building G409 cold solvent cleaner constructed after 1990; and one (1) Building 254 cold solvent cleaner constructed after 1990 are subject to the following:

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (1) Equip the cleaner with a cover;

- (2) Equip the cleaner with a facility for draining cleaned parts;
 - (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label summarizing the operation requirements;
 - (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
- (e) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaner degreasers (two (2) Building G409 cold solvent cleaners, and one (1) Building 254 cold solvent cleaner) are subject to the following located anywhere in the state of the types described in subdivision (1)(A) through (1)(C) of 326 IAC 8-2-1(b) and construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a

temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (f) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaning facilities (two (2) Building G409 cold solvent cleaners, and one (1) Building 254 cold solvent cleaner) located anywhere in the state of the types described in subdivision (1)(A) through (1)(C) of 326 IAC 8-2-1(b) construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance requirements from previous approvals including the original FESOP were revised in this FESOP Model. The compliance monitoring requirements applicable to this source are as follows:

(a) Nitrogen Oxides (NO_x) From the Nine Boilers

The total usage of natural gas as the primary fuel for all nine (9) boilers including the insignificant units (i.e., boilers 262-2, 293-1, 229-1, and 229-2) shall be limited to less than 738.0 million cubic feet per consecutive month period, rolled on a monthly basis (Note: For every gallon of #2 distillate fuel oil used, 200 cubic feet of natural gas shall be deducted from this limit.). This fuel usage limitation is necessary to limit the potential to emit NO_x to 36.9 tons per year rolled on a monthly basis from all boilers only. Compliance with this limit shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules are not applicable.

(b) Sulfur Dioxide (SO₂) Emissions From the Nine Boilers

The total usage of no.2 fuel oil for all nine (9) boilers including the insignificant units (i.e., boilers 262-2, 293-1, 229-1, and 229-2) shall be limited to 3,332.0 kilogallons per twelve (12) consecutive month period, rolled on a monthly basis. This fuel usage limitation is necessary to limit the potential to emit SO₂ to 82.8 tons per 12 consecutive month period rolled on a monthly basis from the boiler only. But in order for the source-wide SO₂ emissions to not exceed the emission limit, the sulfur content of the no.2 fuel shall not exceed 0.35 % sulfur content. Compliance with the SO₂ limit shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) not applicable.

(c) Sulfur Dioxide Emissions and Sulfur Content

Compliance with the emission limit will be demonstrated utilizing one of the following options:

- (1) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pound per million Btu heat input by:
 - (a) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
 - (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (2) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

(d) Record Keeping Requirements

The source is required to keep records of the following parameters to demonstrate compliance with the SO₂, and NO_x emission limits:

- (1) Actual fuel oil usage since last compliance determination period and equivalent

sulfur dioxide emissions;

- (2) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period. The natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (3) Fuel supplier certifications;
- (4) The name of the fuel supplier; and
- (5) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

(e) Reporting Requirements

- (1) A quarterly summary of the information to demonstrate compliance with the SO₂ and NOx emission limits, including the natural gas usage, fuel oil no. 2 usage, sulfur content of the fuel oil no.2
- (2) The Permittee shall certify, on the form provided, that natural gas was fired in the boiler at all times during each quarter. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during each quarter.

(f) Hydrochloric Acid (HAP)

The waste combusted from the two (2) incinerators shall not exceed a total of 591 tons per twelve (12) consecutive month period, rolled on a monthly basis. This limitation was taken by the company and is equivalent to hydrochloric acid (a HAP) emissions less than 10 tons per year rolled on a monthly basis from both incinerators. Compliance with the HAP limit shall make 326 IAC 2-7 Part 70 not applicable.

(g) Hours of Operation

- (a) The emergency fire pumps and back-up generators operating hours is limited to 500 hours per year;

Conclusion

The operation of this pharmaceutical research operation shall be subject to the conditions of the attached **FESOP No.: F059-12151-00001**.

TABLE I
SUMMARY OF LIMITED POTENTIAL TO EMIT

		Unrestricted Potential to emit (tons/year)							FESOP Limited Potential to emit (tons/year)						
Equipment ID	Fuel Type	PM	PM-10	SO2	NOx	VOC	CO	HAP	PM	PM-10	SO2	NOx	VOC	CO	HAP
Boilers															
254-1	Nat. Gas *	1.7	1.7	0.1	22.3	1.2	18.8								
254-1	Oil	3.2	1.6	79.3	31.9	0.3	8.0								
254-2	Nat. Gas *	2.1	2.1	0.2	27.6	1.5	23.2								
254-2	Oil	3.9	2.0	98.0	39.4	0.4	9.9								
254-3	Nat. Gas *	2.2	2.2	0.2	29.3	1.6	24.7								
254-3	Oil	4.2	2.1	104.2	41.9	0.4	10.5		Individual boilers will not have individual emission limits. Instead, total NOx and SO2 emissions from the boilers will be limited to the totals listed below, based on fuel restrictions of 3332 kilogallons of fuel oil and 738 mmcf of natural gas. See Table 3 for verification of limits and description of highest emitting scenarios from boilers. See Table 2 for derivation of emission limits.						
254-4	Nat. Gas *	2.6	2.6	0.2	34.2	1.9	28.7								
254-4	Oil	4.9	2.4	121.3	48.8	0.5	12.2								
262-1	Nat. Gas *	0.1	0.1	0.0	1.4	0.1	1.2								
262-1	Oil	0.2	0.1	5.0	2.0	0.0	0.5								
262-2	Nat. Gas *	0.1	0.1	0.0	0.9	0.0	0.7								
262-2	Oil	0.1	0.1	3.0	1.2	0.0	0.3								
229-1	Nat. Gas	0.1	0.1	0.0	0.9	0.1	0.8								
229-2	Nat Gas	0.1	0.1	0.0	0.8	0.0	0.7								
293-1	Nat. Gas	0.1	0.1	0.0	0.8	0.0	0.7								
Total: NG primary		9.1	9.1	0.7	118.2	6.4	99.5								
Total: Oil primary		16.8	8.6	410.8	167.7	1.7	43.6								
Total: (Highest)		16.8	9.1	410.8	167.7	6.4	99.5		3.6	2.8	82.8	36.9	2.0	31.0	
Incinerators															
Brule	Waste	3.9	2.5	1.8	3.0	0.2	2.5	27.9	The limit on total waste throughput applies to both incinerators						
Consumat	Waste	3.6	2.3	1.7	2.7	0.2	2.3	25.7							
Total: Incinerators		7.5	4.8	3.5	5.7	0.4	4.8	53.6	1.4	0.9	0.6	1.1	0.1	0.9	9.9
Internal Combustion Engines															
Fire Pumps															
FP-B204	Diesel	1.1	1.1	1.9	15.8	1.4	3.4		0.1	0.1	0.1	0.9	0.1	0.2	
FP-B208	Diesel	1.1	1.1	1.9	15.8	1.4	3.4		0.1	0.1	0.1	0.9	0.1	0.2	
Emergency Generators															
EMG-1	Fuel Oil	1.2	1.2	2.2	18.0	1.7	3.9		1.2	1.2	2.2	18.0	1.7	3.9	
EMG-2	Nat. Gas	0.0	0.0	0.0	4.3	0.0	0.4		0.0	0.0	0.0	4.3	0.0	0.4	
EMG-3	Propane	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
EMG-Tox	Fuel Oil	1.5	1.5	2.5	20.7	1.9	4.5		1.5	1.5	2.5	20.7	1.9	4.5	
Backup Generator															
B409 Gen	Fuel Oil	7.6	7.6	12.9	108.2	9.8	23.3		0.4	0.4	0.7	6.2	0.6	1.3	
Total: Engines		12.5	12.5	21.4	182.8	16.2	38.9		3.3	3.3	5.6	51.0	4.4	10.5	
Fuel Storage Tanks						0.1			0.1						
Labs (Hoods)		< 1	<1				<5	<5	< 1	<1				<5	<5
Future Addition Cushion															
Total Source Emissions		36.8	26.4	435.7	356.2	23.1	143.2	53.6	8.3	7.0	99.0	99.0	6.6	42.4	9.9

Notes:

- Potential to emit based on the maximum rate of operation for 8760 hours per year except as described in notes 2.
- Potential to emit for emergency generators was based on 500 hours per year, as provided by the September 6, 1995 EPA guidance.
- The most common fuel used for the 6 multi-fuel boilers is noted with *. The potential to emit is based on the highest emission rate from either fuel scenario.
- The total emissions for the boilers (with FESOP restrictions) were based on the total fuel limitation allocated to all boilers as an overall limit, not limits for each individual unit.
- The FESOP limited emissions for the boilers represent the highest emission for either type of fuel (i.e., gas or fuel oil).
- The HAP emissions listed for the incinerators reflect HCl emissions only.
- Fuel storage tanks include B212, B241, B254, B262, B418, B254-F, and B409.
- HAP emissions from laboratories include various organic solvents.

TABLE 2
NOX AND SO2 EMISSION LIMITS CALCULATIONS

Source	NOx	SO2
Incinerators	1.1	0.6
Fire Pumps	1.8	0.2
EMG-1	18.0	2.2
EMG-2	4.3	0.0
EMG-3	0.0	0.0
EMG-Tox	20.7	2.5
B409 Generator	6.2	0.7
Cushion for future additions	10.0	10.0
Total of above	62.1	16.2
<i>Remaining amount for boilers</i>	<i>36.9</i>	<i>82.8</i>
Plant total	99.0	99.0

Boiler fuel limit calculations

Natural gas limit

$(36.9 \text{ ton NOx/yr}) * (2000 \text{ lb NOx/ton NOx}) * (\text{mmcf natural gas}/100 \text{ lb}) = 738.0 \text{ mmcf/yr}$

Fuel oil limit

$(82.8 \text{ ton SO}_2\text{/yr}) * (2000 \text{ lb SO}_2\text{/ton SO}_2) * (\text{kgal oil}/(142*0.35) \text{ lb SO}_2) = 3332.0 \text{ kgal/yr}$

Note: The boilers would still be allowed to burn some natural gas after burning the maximum amount of fuel oil in a 12 month period because the boilers would not have exceeded the NOx limit at this point.

STORAGE TANKS EMISSIONS

Tank	Contents	Tank Capacity (gal)	D (ft)	L (ft)	Mv (lb/lb-mol)	VP (psia)	Annual Throughput (gal)	Tank Type	Tank Location	*T (°F)	Fp	C	Breathing Loss (lb/year)	Turnovers N	Kn	Working Loss (lb/year)	Total loss (ton/yr)
B212-G2	GAS	2000	5.22	12	68	4.3	21500	UG	B212	25	1	0.23	58.9	10.8	1	26.7	0.0
B212-G3	DIESEL	2000	5.33	12	68	4.3	6500	UG	B212	25	1	0.23	61.1	3.3	1	8.2	0.0
B241- G4	FUEL OIL	3000	5.33	18	130	0.009	100	UG	B212								
B254-G5/B	FUEL OIL	8000	8	21	130	0.009	5000	UG	B254								
B254-G6/D	FUEL OIL	10000	8	27	130	0.009	6000	UG	B254								
B262-G9	FUEL OIL	8000	8	21	130	0.009	500	UG	B262								
B418-G10	FUEL OIL	3000	5.33	18	130	0.009	600	UG	B262								
B254-"F"	FUEL OIL	250000	40	27.5	130	0.009	178573	AG	B254								
B409	FUEL OIL	10000	10	16	130	0.009	7730	AG	B409								

TABLE 3
VERIFICATION OF NOX AND SO2 LIMITS FOR BOILERS

Fuel usage		NOx Emissions			SO2 Emissions			PM Emissions			PM-10 Emissions			VOC Emissions			CO Emissions		
Natural gas (MMCF/yr)	Oil (kGal/yr)	NOx from N. gas (ton/yr)	NOx from Oil (ton/yr)	Total NOx (ton/yr)	SO2 from N. gas (ton/yr)	SO2 from Oil (ton/yr)	Total SO2 (ton/yr)	PM from N. gas (ton/yr)	PM from Oil (ton/yr)	Total PM (ton/yr)	PM-10 from N. gas (ton/yr)	PM-10 from Oil (ton/yr)	Total PM- 10 (ton/yr)	VOC from N. gas (ton/yr)	VOC from Oil (ton/yr)	Total VOC (ton/yr)	CO from N. gas (ton/yr)	CO from Oil (ton/yr)	Total CO (ton/yr)
738.0	0.0	36.9	0.0	36.9	0.2	0.0	0.2	2.8	0.0	2.8	2.8	0.0	2.8	2.0	0.0	2.0	31.0	0.0	31.0
688.0	250.0	34.4	2.5	36.9	0.2	6.2	6.4	2.6	0.3	2.9	2.6	0.1	2.7	1.9	0.0	1.9	28.9	0.6	29.5
638.0	500.0	31.9	5.0	36.9	0.2	12.4	12.6	2.4	0.5	2.9	2.4	0.3	2.7	1.8	0.1	1.9	26.8	1.3	28.1
588.0	750.0	29.4	7.5	36.9	0.2	18.6	18.8	2.2	0.8	3.0	2.2	0.4	2.6	1.6	0.1	1.7	24.7	1.9	26.6
538.0	1000.0	26.9	10.0	36.9	0.2	24.9	25.1	2.0	1.0	3.0	2.0	0.5	2.5	1.5	0.1	1.6	22.6	2.5	25.1
488.0	1250.0	24.4	12.5	36.9	0.1	31.1	31.2	1.9	1.3	3.2	1.9	0.6	2.5	1.3	0.1	1.4	20.5	3.1	23.6
438.0	1500.0	21.9	15.0	36.9	0.1	37.3	37.4	1.7	1.5	3.2	1.7	0.8	2.5	1.2	0.2	1.4	18.4	3.8	22.2
388.0	1750.0	19.4	17.5	36.9	0.1	43.5	43.6	1.5	1.8	3.3	1.5	0.9	2.4	1.1	0.2	1.3	16.3	4.4	20.7
338.0	2000.0	16.9	20.0	36.9	0.1	49.7	49.8	1.3	2.0	3.3	1.3	1.0	2.3	0.9	0.2	1.1	14.2	5.0	19.2
288.0	2250.0	14.4	22.5	36.9	0.1	55.9	56.0	1.1	2.3	3.4	1.1	1.1	2.2	0.8	0.2	1.0	12.1	5.6	17.7
238.0	2500.0	11.9	25.0	36.9	0.1	62.1	62.2	0.9	2.5	3.4	0.9	1.3	2.2	0.7	0.3	1.0	10.0	6.3	16.3
188.0	2750.0	9.4	27.5	36.9	0.1	68.3	68.4	0.7	2.8	3.5	0.7	1.4	2.1	0.5	0.3	0.8	7.9	6.9	14.8
138.0	3000.0	6.9	30.0	36.9	0.0	74.6	74.6	0.5	3.0	3.5	0.5	1.5	2.0	0.4	0.3	0.7	5.8	7.5	13.3
88.0	3250.0	4.4	32.5	36.9	0.0	80.8	80.8	0.3	3.3	3.6	0.3	1.6	1.9	0.2	0.3	0.5	3.7	8.1	11.8
78.0	3300.0	3.9	33.0	36.9	0.0	82.0	82.0	0.3	3.3	3.6	0.3	1.7	2.0	0.2	0.3	0.5	3.3	8.3	11.6
71.6	3332.0	3.6	33.3	36.9	0.0	82.8	82.8	0.3	3.3	3.6	0.3	1.7	2.0	0.2	0.3	0.5	3.0	8.3	11.3

Highest emitting scenario

Pollutant	Natural gas (MMCF/yr)	Oil (kGal/yr)	Total emissions (ton/yr)
NOx	All of above	All of above	36.9
SO2	71.6	3332.0	82.8
PM	71.6	3332.0	3.6
PM-10	738.0	0.0	2.8
VOC	738.0	0.0	2.0
CO	738.0	0.0	31.0

**TABLE 4
BOILERS**

Potential to emit without FESOP restrictions

Unit ID	Fuel Type	Capacity (mmBtu/hr)	Fuel Burn Rate	Units	Emission Factors (lb/unit)						Potential to emit (lb/hour)						Potential to emit (ton/yr)					
					PM	PM-10	SO ₂	NO _x	VOC	CO	PM	PM-10	SO ₂	NO _x	VOC	CO	PM	PM-10	SO ₂	NO _x	VOC	CO
254-1	Nat. Gas *	51	0.051000	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.4	0.4	0.0	5.1	0.3	4.3	1.7	1.7	0.1	22.3	1.2	18.8
254-1	Oil	51	0.364286	1000 gal/hr	2	1	49.7	20	0.2	5	0.7	0.4	18.1	7.3	0.1	1.8	3.2	1.6	79.3	31.9	0.3	8.0
254-2	Nat. Gas *	63	0.063000	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.5	0.5	0.0	6.3	0.3	5.3	2.1	2.1	0.2	27.6	1.5	23.2
254-2	Oil	63	0.450000	1000 gal/hr	2	1	49.7	20	0.2	5	0.9	0.5	22.4	9.0	0.1	2.3	3.9	2.0	98.0	39.4	0.4	9.9
254-3	Nat. Gas *	67	0.067000	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.5	0.5	0.0	6.7	0.4	5.6	2.2	2.2	0.2	29.3	1.6	24.7
254-3	Oil	67	0.478571	1000 gal/hr	2	1	49.7	20	0.2	5	1.0	0.5	23.8	9.6	0.1	2.4	4.2	2.1	104.2	41.9	0.4	10.5
254-4	Nat. Gas *	78	0.078000	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.6	0.6	0.0	7.8	0.4	6.6	2.6	2.6	0.2	34.2	1.9	28.7
254-4	Oil	78	0.557143	1000 gal/hr	2	1	49.7	20	0.2	5	1.1	0.6	27.7	11.1	0.1	2.8	4.9	2.4	121.3	48.8	0.5	12.2
262-1	Nat. Gas *	3.2	0.003200	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.0	0.0	0.0	0.3	0.0	0.3	0.1	0.1	0.0	1.4	0.1	1.2
262-1	Oil	3.2	0.022857	1000 gal/hr	2	1	49.7	20	0.2	5	0.0	0.0	1.1	0.5	0.0	0.1	0.2	0.1	5.0	2.0	0.0	0.5
262-2	Nat. Gas *	1.95	0.001950	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.0	0.0	0.0	0.2	0.0	0.2	0.1	0.1	0.0	0.9	0.0	0.7
262-2	Oil	1.95	0.013929	1000 gal/hr	2	1	49.7	20	0.2	5	0.0	0.0	0.7	0.3	0.0	0.1	0.1	0.1	3.0	1.2	0.0	0.3
293-1	Nat. Gas	2.1	0.002100	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.0	0.0	0.0	0.2	0.0	0.2	0.1	0.1	0.0	0.9	0.1	0.8
229-1	Nat. Gas	1.8	0.001800	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.0	0.0	0.0	0.2	0.0	0.2	0.1	0.1	0.0	0.8	0.0	0.7
229-2	Nat. Gas	1.8	0.001800	mmcf/hr	7.6	7.6	0.6	100	5.5	84	0.0	0.0	0.0	0.2	0.0	0.2	0.1	0.1	0.0	0.8	0.0	0.7
Total (Natural gas as primary fuel)											2.0	2.0	0.0	27.0	1.4	22.9	9.1	9.1	0.7	118.2	6.4	99.5
Total (#2 fuel oil as primary fuel)											3.7	2.0	93.8	38.2	0.4	9.9	16.8	8.6	410.8	167.7	1.7	43.6
Total (highest emitting scenario)											3.7	2.0	93.8	38.2	1.4	22.9	16.8	9.1	410.8	167.7	6.4	99.5

Potential to emit with FESOP Restrictions

Primary Fuel	Fuel limitation	Units	Emission Factors (lb/unit)						Potential to emit (ton/yr)					
			PM	PM-10	SO ₂	NO _x	VOC	CO	PM	PM-10	SO ₂	NO _x	VOC	CO
Natural gas	738.0	Mmcf/yr	7.6	7.6	0.6	100	5.5	84	2.8	2.8	0.2	36.9	2.0	31.0
Oil	3332.0	kGal/yr	2	1	49.7	20	0.2	5	3.3	1.7	82.8	33.3	0.3	8.3
Highest emitting scenario based on combination of burning both fuels (See Table 3)									3.6	2.8	82.8	36.9	2	31

Emission factor sources

Building 254 Boilers

Natural Gas Combustion - AP-42, Chapter 1-4 (SCC 102-006-02)

Fuel Oil Combustion - AP-42, Chapter 1-3 (SCC 102-005-02)

Building 262 Boilers

Natural Gas Combustion - AP-42, Chapter 1-4 (SCC 102-006-03)

Fuel Oil Combustion - AP-42, Chapter 1-3 (SCC 102-005-03)

Building 229 and 293 Boilers

Natural Gas Combustion - AP-42, Chapter 1-4 (SCC 102-006-03)

TABLE 5
INCINERATORS
POTENTIAL TO EMIT WITHOUT FESOP RESTRICTIONS

Unit ID	Fuel Type	Max input (ton/hr)	Annual input (ton/yr)	Emission Factors (lb/ton)							Potential to emit (lb/hr)							Potential to emit (ton/yr)						
				PM	PM-10	SO2	NOx	VOC	CO	HCl	PM	PM-10	SO2	NOx	VOC	CO	HCl	PM	PM-10	SO2	NOx	VOC	CO	HCl
Brule	Waste	0.19	1664.4	4.67	3.04	2.17	3.56	0.30	2.95	33.50	0.9	0.6	0.4	0.7	0.1	0.6	6.4	3.9	2.5	1.8	3	0.2	2.5	27.9
Consumat	Waste	0.175	1533	4.67	3.04	2.17	3.56	0.30	2.95	33.50	0.8	0.5	0.4	0.6	0.1	0.5	5.9	3.6	2.3	1.7	2.7	0.2	2.3	25.7
Total			3197.4															7.5 4.8 3.5 5.7 0.4 4.8 53.6						
Potential to emit with FESOP restrictions																								
Unit ID	Fuel Type	Annual input (ton/yr)		Emission Factors (lb/ton)							Potential to emit (ton/yr)													
				PM	PM-10	SO2	NOx	VOC	CO	HCl		PM	PM-10	SO2	NOx	VOC	CO	HCl						
Both units	Waste	591		4.67	3.04	2.17	3.56	0.30	2.95	33.50	1.4	0.9	0.6	1.1	0.1	0.9	9.9							

Source of Emission Factors
AP-42 Ch. 2.3

TABLE 6
INTERNAL COMBUSTION ENGINES

	Cap. (kW)	Cap (MMBtu/ hr)	Est. fuel use rate cf/hr for NG gal/hr for oil kgal for prop.	Emission factor lb/MMBtu for oil fired units lb/Mmcf for natural gas units lb/kgal for propane units						Potential to emit (lb/hr)						Unrestricted potential to emit (ton/yr)						Restricted potential to emit (ton/yr)					
				PM	PM-10	SO2*	NOX	VOC	CO	PM	PM-10	SO2	NOX	VOC	CO	PM	PM-10	SO2	NOX	VOC	CO	PM	PM-10	SO2	NOX	VOC	CO
Emg. Generator Group 1: Diesel Fuel Oil (No. 2)			Units (EMG-1)																								
254a	300	2.8	20.4	0.3	0.3	0.5	4.4	0.4	1.0	0.9	0.9	1.5	12.3	1.1	2.7	0.2	0.2	0.4	3.1	0.3	0.7	0.2	0.2	0.4	3.1	0.3	0.7
254b	300	2.8	20.4	0.3	0.3	0.5	4.4	0.4	1.0	0.9	0.9	1.5	12.3	1.1	2.7	0.2	0.2	0.4	3.1	0.3	0.7	0.2	0.2	0.4	3.1	0.3	0.7
241-OUT	300	2.8	22.2	0.3	0.3	0.5	4.4	0.4	1.0	0.9	0.9	1.5	12.3	1.1	2.7	0.2	0.2	0.4	3.1	0.3	0.7	0.2	0.2	0.4	3.1	0.3	0.7
240	260	2.4	20.0	0.3	0.3	0.5	4.4	0.4	1.0	0.7	0.7	1.3	10.6	1.0	2.3	0.2	0.2	0.3	2.6	0.2	0.6	0.2	0.2	0.3	2.6	0.2	0.6
418	275	2.6	19.0	0.3	0.3	0.5	4.4	0.4	1.0	0.8	0.8	1.4	11.5	1.0	2.5	0.2	0.2	0.3	2.9	0.3	0.6	0.2	0.2	0.3	2.9	0.3	0.6
291	65	0.6	4.4	0.3	0.3	0.5	4.4	0.4	1.0	0.2	0.2	0.3	2.6	0.2	0.6	0.0	0.0	0.1	0.7	0.1	0.1	0.0	0.0	0.1	0.7	0.1	0.1
226	250	2.3	20.0	0.3	0.3	0.5	4.4	0.4	1.0	0.7	0.7	1.2	10.1	0.9	2.2	0.2	0.2	0.3	2.5	0.2	0.5	0.2	0.2	0.3	2.5	0.2	0.5
Total EMG-1	1750	16.3	126.4							5.1	5.1	8.7	71.7	6.4	15.7	1.2	1.2	2.2	18.0	1.7	3.9	1.2	1.2	2.2	18.0	1.7	3.9
Emg. Generator Group 2: Natural gas units (EMG-2)																											
229	60	0.6	600.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	2.0	0.1	0.3	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.1
296	70	0.7	700.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	2.4	0.1	0.3	0.0	0.0	0.0	0.6	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.1
428-EAST	60	0.6	600.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	2.0	0.1	0.3	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.1
428-WEST	60	0.6	600.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	2.0	0.1	0.3	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.1
206	45	0.4	400.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	1.4	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
235	45	0.4	400.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	1.4	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
417	45	0.4	400.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	1.4	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
241-PENT	40	0.4	400.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	1.4	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
246	30	0.3	300.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	1.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
288	15	0.1	100.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
223	5	0.0	0.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
276	5	0.0	0.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
292	5	0.0	0.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
244	30	0.3	300.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	1.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
245	30	0.3	300.0	10.0	10.0	0.6	3400.0	82.9	430.0	0.0	0.0	0.0	1.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Total EMG-2	545	5.1	5100.0							0.0	0.0	0.0	17.3	0.4	2.2	0.0	0.0	0.0	4.3	0.0	0.4	0.0	0.0	0.0	4.3	0.0	0.4
Emg. Generator Group 3: Propane units (EMG-3)																											
290	45	0.4	4.3	5.0	5.0	---	---	---	---	0.0	0.0	---	---	---	---	0.0	0.0	---	---	---	---	0.0	0.0	---	---	---	---
248	45	0.4	4.3	5.0	5.0	---	---	---	---	0.0	0.0	---	---	---	---	0.0	0.0	---	---	---	---	0.0	0.0	---	---	---	---
212	5	0.0	0.0	5.0	5.0	---	---	---	---	0.0	0.0	---	---	---	---	0.0	0.0	---	---	---	---	0.0	0.0	---	---	---	---
Total EMG-3	95	0.8	8.6							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B409 Back-up	600	5.6	15.1	0.3	0.3	0.5	4.4	0.4	1.0	1.7	1.7	2.9	24.7	2.2	5.3	7.6	7.6	12.9	108.2	9.8	23.3	0.4	0.4	0.7	6.2	0.6	1.3
Unit burns #2 fuel oil																											
EMG-TOX	2000	18.8	137.2	0.3	0.3	0.5	4.4	0.4	1.0	5.8	5.8	9.9	82.9	7.5	17.9	1.5	1.5	2.5	20.7	1.9	4.5	1.5	1.5	2.5	20.7	1.9	4.5
Unit burns #2 fuel oil																											
Fire Pumps (#2 fuel oil)																											
FP-204	0.8	6.0		0.3	0.3	0.5	4.4	0.4	1.0	0.3	0.3	0.4	3.6	0.3	0.8	1.1	1.1	1.9	15.8	1.4	3.4	0.1	0.1	0.1	0.9	0.1	0.2
FP-208	0.8	6.0		0.3	0.3	0.5	4.4	0.4	1.0	0.3	0.3	0.4	3.6	0.3	0.8	1.1	1.1	1.9	15.8	1.4	3.4	0.1	0.1	0.1	0.9	0.1	0.2
Total Fire Pumps	1.6	12.0								0.6	0.6	0.8	7.2	0.6	1.6	2.2	2.2	3.8	31.6	2.8	6.8	0.2	0.2	0.2	1.8	0.2	0.4
Total all engines										13.2	13.2	22.3	203.8	17.1	42.7	12.5	12.5	21.4	182.8	16.2	38.9	3.3	3.3	5.6	51.0	4.4	10.5

Notes:

Fuel (gallons/yr, cf/yr) were based on 137,000 Btu/gallon (fuel oil) and 1000 Btu/cf (nat gas)
Unrestricted PTE based on 500 hours per year for EMG-1, EMG-2, EMG-3, and EMG-TOX; unrestricted PTE based on 8760 hours per year for B409 Back-up, and Fire Pumps
Restricted PTE based on 500 hours per year for EMG-1, EMG-2, EMG-3 and EMG-TOX; restricted PTE based on 500 hours per year for B409 Back-up and Fire Pumps
Emission factor sources: **EMG-1, EMG-Tox, and B409 Back-up:** SCC 2-03-001-01; **EMG-2:** SCC 2-03-002-01; **EMG-3:** SCC 2-03-010-01; **Fire Pumps:** SCC 2-03-001-02
* Sulfur dioxide emission factor assumes fuel oil sulfur content of 0.5 percent for the EMG-1, Fire Pumps, B409 Back-up, and EMG-TOX